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By-Tough, Allen M.
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As determined in this study of 35 adults in the Toronto area, the single most common and most important reason for adult learning is the desire to use or apply knowledge and skill. Commitment to an action goal (producing, accomplishing, or doing something) came first; then came the decision to learn certain knowledge and skills as one step toward achieving the action goal. Such a goal might be to understand some future situation better, to pass an examination, or to impart the knowledge or skill to others; but these were not so common as other action goals such as producing a report or recommendations. The second largest number of adult learning projects began as a result of puzzlement, curiosity, or a question. Perceptions of what behavior is appropriate, normal, or desirable in a given situation were also influential. Of the set of 13 reasons investigated, the typical adult learner had six reasons for beginning a learning project and seven for continuing it; enjoyment from receiving the content, pleasure from learning activities, and satisfaction from possession of knowledge were among the major reasons for continuing. Implications for researchers and practitioners were noted. (The document includes tables, notes, benefit and cost factors, and 26 references.) (author/ly)

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WHY ADULTS LEARN

A Study of the Major Reasons for Beginning and Continuing a Learning Project

Allen Tough

The Ontario Institute for Studies in Education

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1. Introduction

It is fairly common for an adult to decide to gain certain knowledge and skill, and then to devote many hours to that learning. His methods of learning might include reading, participation in a course or conference, discussion with an expert, and other individual and group activities.

Why does an adult begin and continue a learning project?

In order to study this question, a set of 13 conscious reasons was developed, and was incorporated into a detailed interview schedule. Thirty-five adults were interviewed intensively in order to test and elaborate the 13 general reasons.

The findings provide greater insight into an adult's conscious motivation at the time he begins a deliberate sustained effort to learn, and at the midpoint of the learning project.

The problem and approach

Various approaches for answering the question of why a person begins learning something are open to the researcher. He can study the motives hidden from the learner's conscious mind by probing into his childhood or his deepest personality characteristics. He can study the relationship between (1) how much or what is learned and (2) the learners' socio-economic status, age, or previous education. He can study the most distant goals or benefits of learning, such as the enjoyment that will result from the new car that will result from increased salary that will result from impressing the boss with one's efforts to learn. Or, looking at this same example, he could study the entire chain of expected benefits.

We decided, instead, to study only the conscious reasons[1] for learning that were in the adult's mind at the time he initiated the learning project.[2] Also, we studied only the first or immediate benefit (such as impressing the boss with one's efforts to learn) when there was a chain of benefits. Little attention was paid to the learner's personality characteristics that might account for his particular reasons for wanting to learn. Instead, attention was focused on the immediate conscious reasons themselves, and they were studied intensively with a two-hour interview rather than a brief check list or other relatively superficial procedure.

Another possible approach (used by Miller, 1967, for example) is to study the positive factors or forces that influence the person in the direction of beginning and continuing the efforts to learn, and the negative forces that push him away from the learning project. If one calculates the weight or strength of each factor, a decision to begin indicates that the sum of the positive forces is greater than the sum of the negative forces. We originally planned to use this approach, or a very similar one, but then decided not to include the negative forces.

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[1] Each superscript numeral refers to the corresponding note at the end of this report. These notes are provided for the reader who wants an especially detailed understanding of the study, and will not be relevant for other readers.

The set of reasons

In every particular learning project, there are one or several particular reasons for beginning and continuing. The task of the theorist is to develop a set of universal or general reasons that will incorporate and organize the multitude of particular reasons. The desired end-product is a set of reasons that are not only comprehensive and general, but also clearly distinct and fairly precise. The set should also be exhaustive in the sense that it should account for the total motivation or desire for beginning and continuing every adult learning project.

During the early stages of this study, a set of 13 reasons for beginning and continuing a sustained effort to learn was developed. This set of reasons was to serve as the central conceptual framework in the study. Consequently, a large portion of the time required to develop it was spent in thinking logically about appropriate distinctions and essential similarities, and in testing each tentative set of reasons with many examples from real life. Some of these examples were obtained in exploratory and trial interviews. In order to keep the number of reasons to the minimum that would accurately reflect reality, the list was expanded only when we discovered an actual example that clearly did not fit the existing set of reasons.

Another step in developing the set of reasons was to consult several works in hopes that they would suggest additional reasons and in order to check the appropriateness of our approach. These works included Allport, 1937; Atkinson, 1964; Berlyne, 1965; Bruner, 1966, chapter 6; Cofer & Appley, 1964; Hall & Lindzey, 1957, chapter 6; Havighurst, 1953; Houle, 1961, 1964; Ingham, 1964; Katz & Lazarsfeld, 1956; Litchfield, 1965; Miller, Gallanter, & Pribram, 1960; Miller, 1967; and Sheffield, 1964.

In a sense each of our reasons was a hypothesis: we wanted to test its relevance in motivating adult learning projects. Two additional aims were to gain some idea of the relative importance of the 13 reasons, and to increase our understanding of each reason by collecting detailed data about it.

Learning projects

A learning project was defined as a series of related learning episodes at which the person spent at least seven hours, although most projects were actually much longer than seven hours. A learning episode is a relatively uninterrupted period of time, usually between ten minutes and four hours, in which the learner's primary intention is to gain certain knowledge and skill. He may do so by reading at home, for example, by asking his colleagues certain questions, by attending a class, or by thinking creatively in his office.

Attention was focused primarily on real-life learning related to the person's job, volunteer work, family, home, hobby, and so on. Learning that was motivated primarily by a desire for academic credit was excluded. Some of the learners we interviewed did attend a non-credit course as one of their learning activities: we studied their reasons for the entire learning project (their reasons for wanting the knowledge and skill) rather than merely for attending the classes.

The learners

During the spring of 1967, 35 adults in one urban area (the Toronto region) were interviewed intensively. They were recruited by circulating (to part-time graduate students, extension students from business and industry, and members of the research team) a mimeographed sheet asking the reader to suggest volunteers for a two-hour interview. This request asked for volunteers who were at least 21 years old, and who had completed at least 6 mo. of further education or training after completing grade 12 (or who clearly had more than average intelligence).

The volunteers from whom the interviewers selected 35 individuals were certainly not rigorously representative of any larger population, in the usual sense. At the same time, the general findings would probably be duplicated with almost any group of urban, middle class, fairly well educated, relatively young, North American adults.

Most of the volunteers were in their twenties or thirties (18 and 10 persons respectively), but several were in their forties, fifties, and sixties (3, 2, and 2). No one was under 21 or over 69. The majority had a college degree (9 of these 21 had at least 2 degrees), 5 others had completed at least one year of college, 8 others had completed at least 6 months (full-time) of training or professional preparation, and another had completed the equivalent of grade 12.

One-third (12) of the 35 persons were men and two-thirds were women. All of the men were employed or were full-time graduate students, and all but two of the women worked at least part time at some occupation other than managing the home.

2. The Interview Procedure

Each of the 35 interviews was a cooperative effort. The interviewer explained her purposes and procedures to the person being interviewed, answered his questions, and generally tried to be open and frank with him. Indeed, part of the interviewer's job was to teach the person accurately about our purposes and our 13 reasons: in no other way could accurate data be obtained. Apparently all of the adults understood the aims and reasons clearly, and cooperated willingly.

The interviews were conducted by two research assistants, Mrs. Heather Knoepfli and Miss Vida Stanius. Each interviewer already had an excellent manner for establishing rapport in an interview, and each developed a high level of interviewing skill. Both of these intelligent young women participated in the development and testing of the set of 13 reasons and the interview schedule. Consequently, they understood the purposes of the study, could clearly see the distinctions among the various reasons, and were able to handle the complex procedures and probing that the interviews required.

The interview schedule will now be summarized. In addition, some details will be found in later sections of this report, and the reader can refer to a complete set of the mimeographed materials used by the interviewer (Tough, 1968).

After the usual preliminaries, the interviewer announced her purposes by saying, "In this research, we are interested in why adults begin a deliberate effort to learn certain knowledge and skill. During this interview we first will choose one thing you have tried to learn during the past few months, and I will then ask you certain questions about it. The learning we select can involve any sort of information, knowledge, or skill at all. The only requirement is that you have spent several hours at the learning." If the person did not think of one or two examples fairly soon, she presented him with a list of possible subject matter in order to jog his memory.

The interviewer listed the first two or three or four examples given. She checked each example against the criteria contained in the definition of an adult learning project, especially the following criteria:

--there were several clearly related learning episodes, and the person began each of them primarily in order to learn;
--this series of learning episodes began less than 9 months before the interview;
--within some 6-month period, the person spent at least 7 hours at the learning;
--of these 7 hours, at least 5 were spent at learning activities (rather than deciding whether to begin and continue, planning the learning activities, or arranging appropriate conditions for learning);
--the primary goal of the learning project was not the successful completion of a course or series of lessons, and the learning project was not conducted for academic credit.

The interviewer then selected one example. If she had a choice, she first eliminated any example that seemed vague or difficult to discuss clearly, and then selected the one that seemed most important to the learner or the one the learner was most enthusiastic about.

Next, the interviewer and the learner together clarified and recorded the knowledge and skill he was trying to learn, the first learning episode, and the other learning episodes.

Next, mentioning the first learning episode, the interviewer said:

> This was the beginning of your learning project. Now we are going to talk about some of your reasons for beginning the learning project. I assume you made a fairly conscious decision to begin, and I am interested in why you began to learn . . . .
>
> In our research project, we have tried to work out some common reasons that people have for beginning and continuing a learning project. We have put these on several sheets, and want to discover which ones fit your learning project. Perhaps you had several reasons, or only one or two reasons.
>
> Right now, we are going to look at one of the reasons that some people have. Here is a sheet that describes this first reason. [The wording of each sheet is reproduced in the section devoted to the findings regarding that reason.] Please read it, and think about whether it was one of your reasons.

Dealing with each of the 13 reasons in turn, the interviewer was instructed to help the person understand that reason: "Do everything possible to make sure he does not confuse it with some other reason. Note that each reason excludes all previous reasons. Teach him our vocabulary and thinking whenever necessary. Help him see the possible relevance of the reason in his learning project by translating our terms into particular aspects of his project."

After reading and discussing the reason, the adult was asked to rate its strength at two times during the learning project: (1) its strength, at the time of the first learning episode, in influencing his decision to begin the whole learning project, and (2) its strength, when he was about halfway through the learning project, in increasing his motivation to continue. For each of these two ratings he selected one point on the following four-poing scale: "this reason was (a) very strong, (b) fairly strong, (c) weak, but definitely present, (d) not present at all."

For each reason, a set of about 6 questions of particular relevance to that reason was developed and used in order to obtain detailed information about certain aspects of that reason.

After all 13 reasons had been discussed, the learner was asked to select the most important reason for beginning and continuing his learning project.[3]

3. Some General Findings

Four clusters of general findings emerge from an overview of the quantitative data.

Diversity of reasons

First, a surprisingly large number of reasons are present in the typical learning project. The mean number of reasons present in a project was 6.7, and the median was 6. That is, about half of the 13 hypothesized reasons were present in the typical learning project, and about half were absent. One person was motivated by 11 different reasons, and 2 others by 10.

The mean number of reasons that were strong ("very strong" or "fairly strong") was also high: 5.4. In short, in the typical learning project, 5 different reasons are strong, and another one is weak but definitely present.

Clearly, then, the motivation for beginning and continuing a learning project is usually quite complex. A mixture or variety of reasons is almost always present: the lowest number of reasons in any one project was 3, and at least 2 reasons were strong in every project. Apparently it is rare for an adult learner to be motivated by only one reason, even 2 or 3 reasons are fairly uncommon.

These findings point up the inappropriateness of trying to generalize too much about why adults learn. If each adult begins and continues each of his learning projects for a diversity of reasons, it is clearly absurd to attribute some one reason (such as money or the love of learning) as the exclusive motivation for all adult learning.

Profile

The second general finding is simply another profile of the typical adult learner, but with the reasons for beginning and those for continuing separated rather than combined. Table I shows that 6 reasons influence the typical learner's decision to begin. Two of these are very strong, 2 are fairly strong, one is weak, and the other one is fairly strong or weak.

TABLE I

PROFILE OF THE TYPICAL ADULT LEARNER

	Very Strong	Fairly Strong	Weak but Definitely Present
Mean number of reasons for beginning	2.0	2.3	1.3
Mean number of reasons for continuing	2.9	2.3	1.4

Motivation for continuing

Table I also suggests a third major finding: the typical adult learner has one more reason for continuing his learning project than for beginning it.[4] That is, it is common for one or two additional reasons for continuing the learning to arise after the project has begun.

Although no estimate of the strength of total motivation was requested during the interviews, it is interesting to speculate about this, using the data that were obtained. It seems probable that, for many learners, the total motivation for continuing is stronger than their original motivation for beginning. This possibility is suggested by two findings: the larger number of reasons for continuing, and the fact that this larger number is due primarily to the increase in very strong reasons (Table 1).

In learning projects in which the motivation to continue is even stronger than the motivation to begin, there usually will be little tendency to stop prematurely. Indeed, after studying more than a hundred adult learning projects we have realized not only that the motivation to continue is surprisingly strong, but also that it is relatively rare for a learner to be troubled by a tendency to quit before reaching his goal.

Relative importance of the 13 reasons

The fourth cluster of general findings is presented in Table 2 and in the supplementary table.

The three previous generalizations were based on an examination of the data for individual projects. Table 2 changes our point of view by organizing the data according to the 13 reasons.

Ten of the 13 reasons were present in at least one-third of the projects, and 6 reasons were strong in one-third of the projects. Even the least common reason was fairly strong in two projects.

4. Three Patterns of Events

The findings about each of the 13 reasons, starting in the next section, may be grasped more easily by keeping in mind 3 major patterns or sequences of events.

The most common pattern found in the interviews consisted of these steps: 1. the person decided on, or was assigned, some action goal such as producing a report or address, or teaching more effectively; 2. he immediately saw the need for certain knowledge and skill in order to achieve his action goal at an appropriate level, or he soon became aware of this need; 3. consequently, he decided to try to learn that knowledge and skill.

A second pattern, which was also fairly common, is similar except for the first step: 1. a person becomes puzzled or curious about some question or phenomenon; 2. he realizes what knowledge will be relevant for satisfying his curiosity or answering his question; 3. as a result of these two steps, he decides to try to find and learn that knowledge.

There is a third possible pattern, but it did not emerge clearly from our interviews (probably because we did not ask a very precise question about it).

TABLE 2

RELATIVE IMPORTANCE OF THE 13 REASONS[a]

	Number of Projects in which Very Strong or Fairly Strong		Number in which the Reason was Selected as "The Most Important" for Beginning[b]
	For Beginning	For Continuing	
1. Use in order to understand	11[c]	11	3
2. Use in an examination	2	2	0
3. Use in order to impart	12	15	3
4. Use for taking action	29	33	21
5. Someone noticing the learning efforts	7	9	1
6. Puzzlement, curiosity, or a question	22	15	9
7. Satisfaction from possession	13	15	3
8. Enjoyment from receiving the content	14	20	0
9. Enjoyment from practicing the skill	8	10	1
10. Feeling of learning successfully	6	18	0
11. Pleasure from the activity of learning	18	17	1
12. Completing unfinished learning	3	3	0
13. Unconnected benefits	5	10	0

[a] Additional data about the relative importance of the 13 reasons are presented in Table 6, which is included with the notes.[5]

[b] N=35.

[c] Several individuals selected 2 reasons as equally important.

The third step of the other two patterns (the decision to spend some time learning) is the first step of this pattern: 1. a person decides to spend some time learning something, or improving himself somehow (because he has some free time available or he wants to become a better person or he enjoys the activity of learning, or because some person or educational institution or other organization requires or insists that he learns something); 2. he decides what particular knowledge and skill to learn during that time.

5. Using The Knowledge and Skill: An Introduction

One major reason for wanting to gain certain knowledge and skill is the expectation of using that knowledge and skill somehow: the learner wants to use or apply it in some future situation. The expectation of somehow using the knowledge and skill was the most common and most important motivation in the 35 learning projects we studied. For example, 71% of the learners were motivated to begin primarily by the desire to use the knowledge and skill they would gain, and all 35 learners found that this motivation strengthened their desire to begin learning.

There are various ways of using knowledge and skill. This study includes four reasons in which the expected benefit was the use of the knowledge and skill. The first reason in the interview was the desire to use the knowledge and skill in order to understand the content being received in some future situation. (In this reason the learner uses the knowledge and skill in order to take in something: in the other 3 he uses it in order to give out or produce something.) The second reason was the desire to use it in an examination situation. The third was the desire to impart the knowledge and skill to others. The fourth reason was using it for taking action, such as making a plan or decision, performing a responsibility, or accomplishing something else not included in one of the first 3 reasons.

The reasons will now be discussed in the order in which they were presented in the interview. This order is significant because of an arbitrary rule concerning the definition of each reason: each reason excludes all preceding reasons.

6. Use in order to Understand (Reason #1)

The first way of using the knowledge and skill, as described in the mimeographed sheet handed to the learner, was the following:

> 1. Sometimes a learner wants to gain certain knowledge and skill so that in some future situation he will be able to understand better what he is reading, hearing, or watching.
>
> He anticipates some possible future situation in which he will be primarily receiving certain stimuli rather than doing (accomplishing) something. In other words, he will be reading, listening, observing,

or trying to learn. While doing so, his new knowledge and skill will enable him to do so with greater understanding, insight, or appreciation.

Here are some examples to make this clearer: (1) he wants to be able to understand a certain lecturer or book better; (2) he studies music appreciation in order to benefit more from the next concert he attends; (3) he is learning the technical terms in a certain field now so he will be able to read advanced books in the field; (4) he wants to understand a certain person's behaviour; (5) he wants to increase his understanding of certain topics in conversations or newspapers; (6) he expects to enjoy discussing the new ideas or information with a few people, and expects to spend most of his time listening rather than talking.

The person wants the greater future understanding or insight for its own sake, rather than as a means to accomplishing something. He does not intend to use his greater understanding in order to impress or persuade other people, raise a child more successfully, or accomplish something else.

An essential idea in our concept is that the learner wants the greater understanding in some future situation only in order to feel happier or more relaxed in that future situation. Consequently, the final paragraph in the description is an essential part of its definition. In some interviews, however, the learner failed to grasp or follow this final paragraph. Instead, several learners identified future situations in which they wanted to understand something better for the purpose of taking action (reason #4) or passing an examination.

Of the 35 learners, 11 found this a very strong or fairly strong reason (Table 2), and another 6 found it present but weak.

Increased insight into just what this reason actually means in real life can be obtained from examining Table 3. It outlines the projects in which this reason was strong.

7. Use in an Examination (#2)

The second way of using knowledge and skill was a fairly strong reason in only 2 projects. It was described as follows:

2. Sometimes a learner tries to gain certain knowledge and skill because he faces some definite future situation in which he will be tested or examined on this knowledge and skill. He wants to prove to some other person that he does possess that knowledge and skill.

During the learning, the learner has in mind a certain situation that will not last longer than a few hours spread over one or two days.

Both the learner and the other person clearly regard the situation as definitely an examination situation - or at least as a brief situation in

TABLE 3

EXAMPLES OF USING KNOWLEDGE IN ORDER TO UNDERSTAND

The Future "Receiving" Situation (Hearing, Observing, Reading)	What the Learner Wanted to Understand Better in That Situation	The Knowledge and Skill He Learned in Order to Do So	Why He Wanted to Understand Better (Apart From General Interest)
a conference on educational television for adults, and the meetings of the planning committee[a]	the discussions about issues and policies	about ETV	She wanted to know and appreciate what was going on, apparently apart from any desire to perform at the planning and conference sessions.
a forthcoming national election[a]	the events during the campaign, and the statements made by the newspapers and politicians	how a national election is administered	
reading articles about nursing education after leaving the nursing profession[a]	these articles	about the philosophy and objectives of nursing education	"to keep in touch with developments in nursing education" and "to appreciate advances"
observing underprivileged elementary school pupils in her class	the behavior of these pupils, and the reasons for any progress observed as a result of a new approach	the usual results of this approach, and their causes	"interested" in the pupils and their progress
observing his adult students in an English class	the behavior of "underprivileged adults"	their problems, especially their problems as learners	because of his long-standing interest in the problems of "underprivileged" persons.

TABLE 3--Continued

EXAMPLES OF USING KNOWLEDGE IN ORDER TO UNDERSTAND

mathematics classes she was attending (not for credit)	the content	the content	(apparently) in order to feel more comfortable
whenever she hears electronic music	electronic music, including how it is composed and produced	electronic music	because this sort of music is new, and is becoming more common
hearing conversations about the Vietnam war	various views about the causes and appropriateness of the war	the historical and political background of the war and of Vietnam	
all future group and one-to-one situations	her own behavior and feelings in a group, and those of others	the knowledge and skill gained at a human relations training lab	
whenever attending an opera, play, or musical performance	the problems and movements of the performers and the decisions of the director	the experience of performing in an opera	He wanted "to appreciate more what would be going on in front of me."
future advanced reading about unidentified flying objects	advanced ideas about UFO's	about UFO's	

[a] The first three examples in this table are the 3 persons who selected this as the "most important" reason for beginning: each of them also selected one other reason as equally important.

which the learner's task clearly is to demonstrate or prove his possession of the knowledge and skill.

The last paragraph was included to eliminate conversations in which the learner is trying to display his knowledge but the other person's purpose is not to evaluate him. We were willing to include an intensive job interview, however, because both persons might regard it as an examination situation in which the employer asks questions to test the applicant's knowledge.

The interviewers were told that the learner must expect to display his knowledge and skill by actually performing during the future situation, not merely by showing a finished product such as a manuscript or sketch.

One learner was preparing for a driving test and the other was preparing for golf tournaments sponsored by his club. The latter wanted to do well in this situation in order to obtain "a sense of accomplishment."

8. Use in order to Impart (#3)

The third reason is the following:

> **3. Sometimes a learner tries to gain certain knowledge and skill in order to pass it on to another person or to several people. That is, the learner's goal is to increase the knowledge and skill of one or more other people.**
>
> **The learner expects to impart the knowledge and skill by means of a speech, conversation, written article or summary, lecture, lesson, showing someone how to do the skill, or other method.**

This reason was very strong in one-third of the projects, and most important in 3 (Table 2).

Several projects in which this reason was very strong or fairly strong are outlined in Table 4.

This reason is especially interesting because it involved the phenomenon of learning not just for one's own sake, but in order to impart the knowledge and skill to other persons. What sorts of reasons motivate people to set out to teach other people or to help them learn? Some useful insight into this fascinating question can be gained from the righthand column of Table 4. The following list of some general underlying reasons for wanting to impart knowledge and skill was developed by studying that column.

1. The person must train or teach others in order to perform his responsibilities successfully.
2. The person wants to improve (or at least change) the performance of certain other persons (often superiors, colleagues, or subordinates at work.)
3. By doing so, he wants to improve the organization (or its procedures, effectiveness, or profits).

TABLE 4

EXAMPLES OF LEARNING IN ORDER TO IMPART

The Person to whom the Knowledge and Skill was To Be Imparted	The Expected Situation or Method for Imparting	The Knowledge and Skill	Why the Learner Wanted These Persons To Gain This Knowledge and Skill
his fellow teachers[a]	casual conversations	better methods of teaching post-secondary technical students	He noticed some incompetence.
her fellow workers in a public relations department	conversations	the source of news that each medium wants	They asked her, and she considers it important that they know.
skeptics about UFO's; acquaintances who come to her for information	conversations	evidence about the existence and characteristics of UFO's	"She had come to believe in their existence and she felt it was very important for everyone to know about them."
nursing colleagues and students in her hospital	distributing printed materials, and conversations	a new nursing curriculum and its rationale	(1) necessary to impart certain information in order to obtain intelligent suggestions; (2) to help them understand the new curriculum and to obtain their support
several colleagues in her organization	conversations	her experiences in a human relations training lab, and the method used	The colleagues could use this knowledge.
her two supervisors (in a hospital)[a]	written report and consequent discussion	recommendations for a revised manual and accounting procedure	(1) to fulfill their request for help; (2) to act as a bridge to bring staff opinions to the supervisors; and (3) to influence their thinking about improving the procedures
the directors of his company	a written report plus some discussion	the uses, media, and costs of advertising	eventually to improve profits

TABLE 4 -- Continued

EXAMPLES OF LEARNING IN ORDER TO IMPART

three of his theological professors	writing and distributing a paper, and planned conversations	educational objectives and theological education	to improve the teaching in the college he was attending
the persons he trains and his superiors	training sessions (discussions), conversations, and occasional distribution of excerpts from books	principles of adult learning and teaching	to aid their self-development (competence) and thus their satisfaction with life
her secondary-school students in a course about family living[a]	classroom teaching	stages and problems in a family	to help the students pass the course and deal with family living
the students in his Sunday-school class	discussion in class	the major beliefs and practices of four major religions, and their historical development	He believes (1) that any Christian should understand the history and philosophy of Christianity and (2) that each person should learn about a variety of religious beliefs before deciding about the existence and nature of God
adolescents in Sunday school	brief articles in a national Sunday school paper	biographical information about Canada's prime ministers	She wanted these historical figures to seem real, human, and interesting, and she felt this was especially relevant during Centennial year
one riding's polling staff for a national election	classes and conversations	what each person was to do	necessary for conducting the election in the riding for which she was responsible

[a] One of the three learning projects in which this was the most important reason for beginning and continuing.

4. The person wants to obtain the support of certain individuals for an idea or change.

5. The person expects to obtain more intelligent and realistic suggestions from certain individuals after giving them certain knowledge about the situation or problem.

6. The person responds to a request for help or information.

7. The person wants to impart the knowledge (to "everyone" or to certain individuals) because of his strong belief in its importance, or because of his great interest in it.

8. The person wants to help his students pass a course or examination. (This is related to the first and seventh item in this list, but could also be distinct from them.)

For one-quarter of the learners, the strength of this reason increased after the project began. That is, after learning some of the knowledge, the learner became aware (or more aware) of how useful or important this knowledge would be for certain other persons to have. Simultaneosly, of course, some learners probably become more committed and enthusiastic themselves about the new knowledge, skill, or procedure.

Although the desire to learn the knowledge and skill usually arises after the person has decided to impart it or after the learning project has begun, another situation is possible. The person may deliberately accept a commitment to teach a class, write an article or report, or impart certain subject matter in order to provide motivation or an excuse for learning something that he already wants to learn anyhow. There are three examples of this situation among our interviews. One man volunteered to teach a Sunday-school class because he himself wanted to learn. According to the interviewer, "he asked for this class because he felt that it would give him, as well as the students, an opportunity to explore the question of the existence and nature of God." The man who learned about advertising volunteered to write the report for the board of directors: "the project was essentially initiated by S himself." The woman who volunteered to write the article about Canada's prime ministers "felt that the series could serve as her own individual Centennial project."

9. Use for Taking Action (#4)

What did the person expect to do with the knowledge and skill: In what way did he expect to use it? One reason for wanting certain knowledge and skill is for future use in understanding the content in some situation (reason #1). A second future use is to directly demonstrate its possession to some other person (#2). The third thing that one can do with the knowledge and skill is to impart it to others.

We come now to the fourth way of using the knowledge and skill: using it for taking action -- for producing something, planning or deciding something, or performing some responsibility. Of all the 13 reasons for learning, this one was clearly the most important. It was described as follows:

4. Sometimes a person wants to do something, and he learns in order to do so -- or in order to do so more effectively.

That is, he tries to gain certain knowledge and skill because he wants to apply it directly in order to do something, accomplish something, produce something, or decide something. Or to do something better.

Or he wants to use the skill in order to play some sport or musical instrument at a better level than he could without learning.

Or he wants to talk successfully in conversations about a certain topic. Or he wants to do a good job while giving a speech, while teaching, or while defending his actions and decisions.

The knowledge and skill is a means or a tool for dealing successfully with some task, situation, decision, or activity. First he learns; then he applies or uses the knowledge and skill.

Please remember that each of these sheets excludes the reasons described on all previous sheets.

Most of the learners found that this was a very strong or fairly strong reason for beginning and continuing the learning project. Table 2 shows that no other reason was as common. It also shows that a very large number of learners chose this reason when asked to select their most important reason.[7]

One other statistic is also impressive: this reason was strong or at least "definitely present" in every one of the 35 projects.

Apparently some learners, as they proceed with a project, discover more uses for the knowledge and skill than they expected. In this study, 31% of the learners found this reason was stronger for continuing the project than for beginning it.

Probably the best way to understand how this reason operates in real life is to consider several actual learning projects in which it was an especially strong reason. Consequently, an outline of several projects is presented in Table 5. It includes only the 21 projects in which this reason was most important.

TABLE 5

THE INTENDED USES OF CERTAIN KNOWLEDGE AND SKILL IN 21 LEARNING PROJECTS

A medical student, when he became the circulation editor of his university's medical journal, set out to gain certain knowledte and skill in order to increase its circulation.

A free lance writer decided to prepare a series of 200-word biographical sketches of Canada's prime ministers for a national Sunday-school paper. Conse-

TABLE 5 -- Continued

quently, she set out to gain certain information about each of the 14 prime ministers.

A young unmarried woman wanted to make certain clothes that could not be bought. Consequently, she had to learn certain techniques in operating a sewing machine and how to choose appropriate materials and patterns. As she continued, she also realized that her new knowledge and skill would be useful later for making children's clothes and curtains.

An investment dealer was aware that his company was becoming interested in the possibility of developing an advertising campaign. Consequently, he offered to learn the knowledge necessary for preparing recommendations concerning media, content, and budget.

In his first term as a theological student, a man in his middle 30's became dissatisfied with some of his courses. He decided to try (by talking with some of the professors, by writing a major paper, and by working as a member of the student council) to initiate a movement that would lead to improvements in some courses. Consequently, he began to learn about objectives and curriculum in theological education.

A man learned about the West Coast in order to decide whether to take a vacation trip there, where to go and what to see, and how much to spend.

A teacher set out to improve his reading speed and comprehension so that he could read more material than before.

A woman working for a children's aid society was suddenly assigned her first "battered child" case. Consequently, she had to learn the correct legal procedures for taking the child into custody, and how to handle the parents. Later, when told she would soon receive additional cases, she also set out to learn about the symptoms of a battered child, the causes of such parental behavior, and how to help the child and the parents.

In order to perform more competently and independently in her work in the public relations office of a large company, a woman set out to learn what sorts of items the various media considered newsworthy for their audiences.

One man learned about how computers work, about "systems," and about his company's needs, in order to recommend the most suitable computer installation for the personnel department.

A woman in her 60's learned some general mathematics to help her perform better in a future statistics course.

A married secretary in her 30's became more competent at sewing in order to make and alter her own clothes.

A young singer had agreed to sing in 6 operas, and he wanted to perform very well. Consequently, he worked hard at learning the words, music, and stage movements for his 6 parts.

A man learned how to train his dog to be a good retriever for hunting, and to be obedient in his apartment and in a car.

A young woman set out to learn certain skills (make-up, walking, clothes) necessary for becoming a successful model, and to learn about certain characteristics of this occupation. She realized later that she could also apply her new skill in her everyday life.

A young woman wanted to decide which Canadian political party to join and also expected to work at helping Canadian Indians. Consequently, she learned about Canadian politics and about the needs of Indians.

TABLE 5 -- Continued

One young woman[a] was left with a car but was not able to drive. Consequently, she set out to gain skill in driving, to overcome her fears, and to gain the necessary knowledge about traffic rules and her own car.

A nursing educator was a leader in planning a new curriculum for a hospital school of nursing. In order to formulate the objectives of the program, decide the subject matter for various courses, and plan an internship year, she learned about certain present and future characteristics of nurses' duties, learned what knowledge and skill is required by nurses at various stages of their training, and learned about the curriculum and the organization of instruction in other schools of nursing.

In order to perform effectively in her new job as a proofreader, a woman had to learn the proofreader's symbols, learn how to detect errors, and learn about punctuation.

A woman wanted to teach her Grade I class of underpriviledged children more effectively. Because someone had suggested the language development approach (using the children's interest as a basis for teaching language skills) for teaching such children, she set out to learn about the theory involved in this approach and to develop skill in using it in her own classroom.

A new teacher wanted to greatly increase his competence in teaching English to post-secondary students in order to become more effective and relaxed during his planning and teaching.

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[a] The last five projects are the ones in which the person had two equally important reasons as his primary motivation for beginning.

In a general way, one can distinguish in this table four sorts of uses to which the knowledge and skill was to be put. Two persons wanted to make something (by sewing), 5 wanted to plan or decide or recommend something, one wanted to reform something (a curriculum), and the other 13 wanted to do something else (perform some action or task) or do it better.

Areas of life

The adults for whom this was the most important reason for beginning the learning were asked: "In which areas of your life did you expect to use or apply the knowledge and skill?" From a list of 7 possibilities, they could mark "primarily" for one or two (or none), and "a little" for any number.

Clearly the most important area of life was "YOUR JOB: your full-time job (current or future); your usual occupation (excluding housewife); consulting or free-lance work; earning money." Half of the 20 persons[8] marked this "primarily" and one "a little."

Also especially important was "RECREATION: a sport, game, musical instrument, or other recreational activity engaged in primarily for your own pleasure." Four persons (the part-time opera singer, the man planning a trip, the man training a dog, and a woman learning to sew) marked this "primarily," and 5 "a little."

The knowledge and skill in at least a few learning projects was to be used in each of the other areas of life, as shown here:

"YOURSELF: to know and understand yourself better; to work out the meaning of your life or your own philosophy of life; to work out your own fundamental purposes or goals." (3 primarily and 3 a little).

"YOUR STUDIES: your course work, exams, or thesis as a part-time or full-time student enrolled in an educational institution." (4 primarily[9] and none a little).

"VOLUNTEER WORK: work in the community; church work; committee work; political work; or other volunteer work." (2 primarily and 2 a little).

"YOUR HOME AND FAMILY: raising a child; managing family finances; buying things for your home or family; repairing your house or apartment." (none primarily and 3 a little).

"YOUR FRIENDS AND RELATIVES: helping a friend or a relative (other than a member of your family living in your home); trying to be more effective in your relations with friends and relatives." (none primarily and 3 a little).

10. The Relationship Between Action and Learning

We noted earlier that the desire to learn certain knowledge and skill in order to use it for taking action was the most important reason for beginning 21 learning projects. Each of these 21 learners was asked a few additional questions designed to help us understand better just why he decided to spend some time, effort, and perhaps money at this learning. In short, what was the relationship between the action goal (the desired end-product or whatever) and the learning?

Was the learning project necessary?

First, we were interested in why the person decided to perform the responsibility at all: why did he accept or initiate this action project? In order to discover this, we asked how necessary it was for him to perform the responsibility: we asked, "Could you have persuaded or paid someone else to perform the task?"

For 4 learners, the question was almost irrelevant. They wanted to use their new knowledge and skill in the future in order to drive a car, to read more books faster, or to be successful in a prospective new career. Clearly no one else could have done the learning for these 4 persons.

Six replied that they wanted to perform the responsibility themselves, though it would have been possible to pay or persuade someone else to do so. For example, the person himself wanted to plan a trip, carry out an extra-curricular activity at university, make her own clothes, or train his own dog.

Eight were performing the responsibility as part of their full-time or part-time job. Half of these did say, however, that they had initiated or accepted this particular responsibility partly because it would encourage them to learn: in addition, two felt their supervisor had assigned the responsibility because he believed the person would like to learn the required knowledge and skill.

Why was the learning useful for action?

Once the person has decided to perform the responsibility or action, why does he bother spending time trying to learn: why does he not just go ahead and take action? I hypothesised four sorts of possible reasons for this, but two of them turned out to be very rare.

One possible reason for learning before acting was worded as follows on a mimeographed sheet handed to the learner: "Perhaps part of your reason for learning was that you had to learn in order to complete the task at all -- even at the lowest possible level. That is, you could not have performed the task at all before learning certain knowledge and skills that you did not already have."

Only one person said this was true in his project: all the others said that they could have performed the action (though perhaps at a fairly low level) with the knowledge and skill they already possessed before beginning the learning.

Another possible reason for learning before acting failed to produce much response because I did not communicate it clearly, and because even those who did understand it said it was not relevant in their project. This reason was simply that some persons might learn because learning is their habitual way of approaching a task. That is, their decision to learn is not a conscious decision at all, and they do not really estimate and consider the amount of time (and effort and money) required for learning.

A third possible reason was relevant in 6 of the 21 projects. The mimeographed interview sheet described it as follows: "Perhaps you could have completed the task at the absolutely minimum level without learning. However, perhaps you expected to achieve it faster by learning. In other words, you expected that the total time spent performing the task would be minimized because you would save more time than you spent at the learning." Six persons felt that, in the long run, they would save time by spending some early time at learning. They learned proofreading symbols and procedures, some tricks and techniques of sewing complex clothes, how to read faster, how to be more effective in a certain publicity responsibility, how to teach better (in order to save time when planning lessons), and how to train a dog efficiently. Apparently appealing to a similar long-run benefits, the dust jacket of one home-repair manual calls the the book "a source of money-saving, time-saving, energy-saving information."

The fourth possible reason was the truly relevant one: almost every person (including the 6 who partly wanted to save time) had learned because of it.

They learned because they wanted to perform above a bare minimum level, or because they wanted to perform more successfully than they could without learning. Or they wanted to make a better recommendation or report or product than was possible without learning. And one person wanted to drive better and one wanted to read faster.

The important finding, then, is that most learners felt capable of performing the responsibility or action without any learning at all, but they decided to learn in order to perform more efficiently or successfully than they could without learning.

We then asked each of these learners why he wanted a higher level of performance. From a short check-list of possible reasons most of them selected "to feel more confident" and "to feel satisfaction in doing a good job." Almost as many said "to avoid undesirable consequences or unpleasant feelings." Examples of these were the scoffing of colleagues, the rejection of a report, failure, and being fired (or not being asked again to perform a certain part-time task for pay). Several wanted "to receive praise," and one added to the check-list her desire to feel proud of herself. One person wanted to reach a higher level of knowledge about travel to a certain region early, in order to save money later on his trip, and we have already noted that several learners expected to save time later. Finally, the detailed responses suggest that a few learners were motivated by a desire to help their employer (by saving the company some money or time, for example) or by a strong feeling of responsibility to do a good job for the employer.

When did the learner realize the relationship?

It seems possible to push our understanding of the relationship between action and learning even further. Consequently, we asked one additional question of each person for whom reason #4 or #3 was the most important reason for beginning. We asked when and how he became aware that learning was necessary or desirable in order to achieve his action goal. The typical person said that as soon as he decided on the action goal, or at least before he actually began working toward it, he was "aware that it would be necessary or desirable to spend a fair amount of time learning." For most of these people, the need for the learning was immediately obvious, though a few were not especially aware of it until someone told them.

A few individuals, however, did not fit this typical pattern. They did not become aware of the desirability of learning until they had actually tried to achieve their action goal without learning. One of these persons, while teaching a secondary-school course in family living, became aware of the possibility of teaching the course better if she spent some time learning. Another person could see certain things that were wrong or inefficient in her work with publicity through various media. Another person did not have enough knowledge to give a good answer when asked a question (about revising the hospital manual) by her superior. One woman became especially aware of her timidity and lack of coordination when she tried driving a car, and another realized while sewing simple things that much learning would be necessary before making complex things. At least one person became aware of the need for learning when she saw a poor performance by some other person.

Chronological sequence

It is interesting to note the chronological sequence, and relationship, of learning episodes and action episodes. In learning episodes the person's primary intention is to learn: in action episodes it is something else, such as to use or apply the learning.

Each learner was asked to describe the chronological sequence of his learning episodes and action episodes. For each of the 4 reasons discussed so far (the 4 involving the desire to use the knowledge and skill), the findings were similar.[10] About half of the learners had learned a great deal (through several learning episodes) before using or applying it much. The other common pattern was the frequent alternation of learning episodes and action episodes throughout the project: learn and then apply, learn and then apply, and so on.

It is also interesting to note who or what determined when each especially important use of the knowledge and skill occured. Two patterns were common. First, many learners had determined this almost entirely themselves, though usually having to stay within certain limits. That is, each had decided when to fit the uses into his leisure time or his on-going responsibilities.

Second, several other persons reported that someone else had been the primary determinant. That is, a deadline had been set by someone else, or the date of the application situations were fixed by someone else, or a task was assigned by someone else and had to be completed as soon as possible.

II. Someone Noticing the Learning Efforts (#5)

We come now to the following quite different reason for learning:

5. Sometimes a learner receives some pleasure or benefit because some other person is aware that he is learning, or is trying to learn.

For example, that other person may praise or reward him because he apparently is trying to learn.

Or the learner may avoid some punishment or scorn if the other person is aware that he is reading, practising, or performing certain other learning activities.

Or he may maintain someone's friendship by showing some interest (real or apparent) in certain subject matter or activities.

> Or the learner may be pleased when other people realize that he is able to learn very successfully or easily. (They will be aware of his success or speed or progress while learning, rather than being impressed by the resulting level of knowledge and skill.)

This reason was very strong for only 3 learners, fairly strong for 6, and weak for another 7. Clearly the desire to please or impress other people is rarely a very strong part of the motivation for learning, though it is present to some extent in about half the projects.

The 9 learning projects in which this was a fairly strong or very strong reason give us some additional insight into this reason. For example, each of these learners wanted anywhere from one to ten other persons to be aware of his learning: the median was 6 persons. The target persons were husband or boyfriend (4 learners), one or two superiors in some organization (4 learners), and one or more friends, colleagues, acquaintances, parents, or children (7 learners).

Here are the aspects of the learning projects that a learner wanted other people to be aware of:

-- his attempts to learn, regardless of the subject matter (that is, he wanted to be regarded as a learner): 5 learners;

-- his interest in the subject matter (apart from learning it): no one, though this possibility was raised twice in each interview;

-- his attempts to learn certain subject matter (that is, a combination of being regarded not only as a learner, but also as a learner of this specific subject matter): all 9 learners;

-- his success, speed, or progress[11] (that is, being regarded as a successful learner): 5 learners;

-- his interest in certain materials (a certain book or periodical) or a certain kind of learning activity: only one learner (her husband liked her to have learning projects outside the home), although this possibility was raised twice in each interview.

Each of the 9 learners said he hoped other people would have a higher regard or greater respect for him as a result of being aware of his learning. Four people expected even further benefits: one hoped to obtain a part in subsequent operas; one hoped for a promotion (and also believed that the recommendations in his report would carry more weight if the directors knew he had spent much time learning successfully before writing the report); one wanted relief from teasing; and one specifically mentioned wanting "praise."

Three persons seemed to have quite a different reason, an altruistic reason that we had not anticipated, for wanting someone else to be aware of their efforts to learn certain subject matter. They apparently hoped that the other person would obtain pleasure or happiness from knowing of these efforts, or would feel glad or pleased. Two women wanted their husbands to be "pleased:" each woman said her husband had the original interest in the subject matter, and she wanted to share it. The third woman felt that certain people would enjoy sharing (hearing about) her experiences at a human relations training lab, and in addition, because of her attempt to learn about interpersonal relations, "they would be happy for her."

Honesty

When one's goal is to make other people aware of one's learning, there is always the possibility of saving time and effort by making them believe that efforts at learning are occuring when in fact they are not. Consequently, we asked the learners, "Were you trying to make them aware of something that did not actually exist?" All 9 responded with a no.

12. Puzzlement, Curiosity, or a Question (#6)

Now we come to the second most common reason for beginning a learning project. Indeed, it was the most important reason in one-quarter of all projects (Table 2), and it was very strong or fairly strong in 63%. Both of these findings surprised us, as we had not predicted that this reason would be so strong in so many projects.[12]

Here is out definition, which may be narrower or more specific than some definitions of curiosity or puzzlement:

> 6. Sometimes a learner is motivated to find out something because he is puzzled or curious. His pleasure or satisfaction will come immediately from discovering the knowledge or information, quite apart from whether he remembers it.
>
> For example, sometimes a person begins a learning episode because of his feeling of being puzzled by something. He may have a desire to understand something, or he wants to discover what something is really like. Or he wants to find out what is in a certain field or book. Or he has a question that he wants to answer.
>
> Here are some particular examples to make this clearer: (1) He has always been fascinated by the field of psychology, and wants to see what this field contains; (2) He is curious about a certain book, and wants to explore its contents; (3) Computers have been a perplexing mystery to him, and he wants to reduce this feeling of mystery or ignorance; (4) He definitely wants to answer some question, such as "what do some people see in yoga?" or "why did dinosaurs become extinct?", (5) He travels to a certain geographical region because of his desire to see what it is like and to find out what is there; (6) A researcher wants to understand some phenomenon that puzzles him; (7) The learner wants to understand the reasons or causes for an accident, an illness, or a mate's request for a divorce.
>
> In each example, his puzzlement or curiosity or question was strong before beginning one or more learning episodes. Also, this motivation is distinct from any desire to remember or use the knowledge. The satis-

faction or other benefit occurs as soon as he discovers the information or knowledge, not later.

The target of the curiosity

One fairly common target of the curiosity was a procedure or method being used currently in the learner's own job, or being proposed for that job or for his organization. At least 4 persons wanted to learn how effective such a procedure or method was, and the rationale for its effectiveness. Two of these methods were new teaching methods, one was an accounting system, and one was a set of tests used for personnel selection. All four persons felt some skepticism or doubt about the method, but also seemed to be maintaining an open mind and a genuine desire for a fair evaluation of the method.

Two other persons were curious about something beyond the realm of universally accepted, clearly visible, natural phenomena: unidentified flying objects and God. Each sought answers to the same two questions: does it exist and, if so, what are its characteristics? Again, some skepticism or at least openess was evident at the beginning.

Two other persons wanted to find out just what government policy (or their own position) should be. One studied the background of the Vietnam war and the attitude of the Vietnamese people; the other learned about government policies concerning educational television in Canada. Once again, both learners felt some skepticism about the effectiveness or appropriateness of current government policies concerning these two issues.

Two other persons wanted to find out about the inner workings or the "behind-the-scenes operations" of two phenomena: electronic music, and the mass media for news dissemination.

At least 3 persons wanted to go somewhere to see something or try out something. One young woman wanted to find out what the work of a model is like, and what lies behind the glamorous facade. Part of her curiosity arose from her interest in this as a career. Another woman wanted to try out, and see in operation, a new way of learning (a human relations training lab). The third person wanted to travel to the West Coast: "I have heard so much about some of the places in the west that I just want to see for myself what they are really like."

Only one person, who learned about adult learning and teaching, seemed to have an entire body of subject matter as the target of his curiosity.

One woman, a social worker, became curious about the causes of one sort of incredible (to her) human behavior after being assigned a battered child case: why would a parent beat a child so severely?

In addition to their other reasons for learning, 3 persons were curious about the method by which they would be taught.

A common element

There seems to be a common element in these projects: Many of the persons motivated by curiosity or puzzlement apparently felt a strong need to work out their own beliefs or opinions about something. They seemed to be motivated because they frequently encountered two sets of beliefs (God is real and important, or God is dead; UFO's are real, or they are nonsense), or two evaluations (positive and negative) of a certain procedure or government policy (a teaching or accounting or testing method; government policy on Vietnam or ETV). Perhaps every time he encountered a conversation or news item about this matter, and every time he thought about it spontaneously, the learner felt rather uneasy or dissatisfied or vaguely unhappy because he did not understand the background thoroughly, or had not yet worked out for himself his own position or beliefs. Perhaps he felt "I might be wrong" or (my organization or our government) might be wrong" or just "I don't know *what* I think!" Perhaps his feelings involved a sense of "oughtness;" for example, "everyone (or all good citizens, or all intelligent persons, or the sort of person I am) *should* have a position on this matter."

Such learning is not easy, of course, because it requires gathering and weighing the available evidence in order to decide which side is right or whether a procedure is really effective.

Some generalizations

Five tentative generalizations emerged from an examination of the learning projects in which puzzlement, curiosity, or a question was strong.

First, before the learning project begins, the target of the curiosity ranges from (1) something already an important part of the learner's life (a testing procedure in her department; an accounting system; a job involving adult learning and teaching; dealing with the mass media of news dissemination; a battered child) or (2) something that soon will be (a new teaching method; working as a model) through to (3) things that do not seem to be an integral or necessary part of the learner's life (Vietnam policy; UFO's). A major hobby (the woman interested in electronic music spent a great deal of her leisure time playing the piano) and a major trip probably fall somewhere between.

Second, many of the targets of curiosity are *new*: new phenomenon, new issues, recent changes, or proposed changes. Most of these targets are considered important, exciting, glamourous, or controversial by a large segment of the population (or at least by several of the learner's acquaintances or colleagues). The mass media (studied by three persons), for example, were major topics of interest and discussion during the middle 1960's. It may be that many targets of curiosity are almost fads, and will no longer be of interest to many people after a few years or decades. This notion of a fad, or current "hot topic," fits the earlier hypothesis that some learners feel a great urge to work out their own position on some matter that frequently impinges on their mind.

Third, perhaps one reason for beginning certain learning projects and certain action projects is curiosity about oneself. How will I feel in a certain situation (such as a T-group)? (This might be mixed with wanting to obtain an accurate notion of how others feel in the same situation.) How will I behave in a certain situation? (Will I talk in a T-group or remain silent?) How successful will I be if I enter that situation or behave in a certain way? (One person began the action project of managing a small newspaper partly for this reason.) Incidentally, this last question could be the primary reason for beginning an episode that would ordinarily be an action episode, thus transforming it into a learning episode.

Fourth, the curiosity leading to several of the learning projects was sparked by the learner noticing some ineffective procedure, performance, behavior, or result.

Fifth, no single type of triggering impulse stimulus is exclusively important in all learning projects. A variety of responses was elicited by the question, "Did some person, event, announcement, or something else act as an impetus or triggering stimulus to your desire to begin the learning project?" The 6 persons for whom puzzlement was the single most important reason for beginning had been stimulated by a variety of things: a new job, a supervisor, a husband who enthusiastically discussed the content of a new book (plus the ready availability of that resourse, because it was already in the learner's home), a music teacher describing a new field of music and a course about it, a brochure for university extension courses, and a friend talking about Vietnam.

Changes in strength

Before the interview I assumed that curiosity or puzzlement would be a strong reason for beginning a few learning projects, but would then usually decrease in strength as the person proceeded toward an answer. In at least 4 projects, this clearly did occur: the curiosity decreased as the person's understanding or answers increased.

In several other projects, however, the strength changed in the opposite direction. Some learners found that, as they learned new ideas and information because of their original curiosity, something in the new subject matter made them curious or puzzled about additional aspects of the topic. Another reason for increased curiosity was recorded by the man who had begun about half a year earlier to learn about the existence of God: "My curiosity is even greater than it was last September because, although I've read quite a bit now, I have still not been able to come any closer to understanding the question of whether God exists." The woman interested in government policy concerning ETV found that changes in that policy raised additional questions in her mind.

Age

One other finding about curiosity, though based on a small number of cases, suggests an interesting hypothesis. Of the learners in their 20's and 30's, 11% chose this reason as the single most important one for beginning, but of the learners in their 40's and 50's, 43% chose it. Perhaps the strength of curiosity as the primary reason for learning reaches its peak when we are middle-aged -- not when we are children or young adults, as sometimes assumed.

13. A Comparison Of Three Reasons

We decided to distinguish 3 separate reasons that are somewhat related:

a. curiosity, apart from caring whether the answer or information, once found, was remembered for long (reason #6);

b. satisfaction from merely possessing the knowledge (not from using it) (#7); and

c. enjoyment while receiving the content (#8).

These three seem very similar. The benefit in each is close to an ultimate or basic benefit: it is a feeling of happiness, pleasure, satisfaction, or confidence that is an end in itself rather than a means to some further benefit. (We sometimes hear about knowledge or an activity as an end in itself, but really it is the resulting feeling rather than the knowledge that is the end.) Also, this ultimate benefit (pleasure or whatever) comes directly from the content or knowledge: there is no intermediate step. That is, the enjoyment or satisfaction is intrinsic or inherent in the receiving, finding, or possessing of the knowledge.

We assumed that these 3 reasons, though similar, are also clearly distinct. This assumption was supported by two findings. First, only one of the 35 learners failed to understand each of these 3 reasons clearly, and to see the distinctions among them. Second, we assumed that identical responses to two items might indicate that the respondent considered both of them almost identical, whereas different responses indicated that he had made some sort of distinction between the two items. Only one person gave identical responses to #6 and #7, excluding the persons for whom neither reason was present and excluding the one person who could not distinguish these 2 reasons. Only one person gave identical responses to #6 and #8 and no one gave identical responses to #7 and #8.

The satisfaction from #8 comes while reading or listening, from #6 at the time one reaches the answer, from #7 after gaining the knowledge.

14. Satisfaction from Possession (#7)

Here is the wording of the mimeographed sheet describing #7:

> **7. Sometimes a learner definitely wants to gain and retain certain knowledge and skill, and expects some benefit apart from using it or showing other people that he has it.**
>
> **The satisfaction, pleasure, or other internal benefits come from the possession of the knowledge and skill -- from having it, rather than**

> **using or demonstrating it.**
>
> **These benefits come in the future (after he has gained and retained the knowledge and skill) rather than while he is obtaining it.**
>
> **Here are some examples: (1) he regards himself more highly after he reaches a certain level in playing a sport, game, or musical instrument, though he no longer plays; (2) he expects to feel more confident or self-assured, or to have greater regard or respect for himself, when he possesses the knowledge and skill; (3) he wants to have his own set of beliefs about religion, or about the nature and future of man; (4) he feels more confident in his job because he is able to handle any task performed by the people he supervises, although he is certain he will never have to do so; (5) he feels that everyone should have this knowledge and skill; "it is a good thing to know."**
>
> **In all examples, the satisfaction or other internal benefits come from merely possessing or retaining the knowledge and skill. They are distinct from any benefits from the possibility of using the knowledge and skill, or from other people knowing that he possesses it.**

This reason was very strong or fairly strong in more than one-third of the projects (Table 2). As one might expect, several persons could not tell us very precisely just what internal benefits they expected, though they clearly understood the mimeographed description of the reason. It is difficult to find words or expressions more exact than "satisfaction," "self-assurance," or "it's just a good thing for everyone to know." Indeed, for certain decisions, few of us think about or analyse our motivation in any more detail than this.

Nonetheless, some clear insights did emerge from the information given to us by the learners for whom this was a relevant reason. Their responses indicate that all but one or two of them grasped the reason clearly: they expected their pleasure or other benefit to arise directly from the mere fact that they would possess[13] the knowledge and skill.

The internal benefits

We asked the 21 persons for whom this had been a relevant reason to tell us what internal benefit they expected or what exactly had motivated them. Three clusters of benefits seem to emerge from the multitude of answers. The responses of some individuals fit into two or three of the clusters: others into only one.

One cluster seemed to incorporate the curiosity-fascination-interest (usually concerning a topic of great importance to the learner or to society) found in the "curiosity" reason (#6) already discussed. In the present reason, however, the curiosity-fascination-interest was not in seeking or finding the knowledge but in remembering or possessing it.

The benefit in this cluster was the pleasure, satisfaction, happiness, or joy of having the knowledge. The positive feeling seems to arise directly from the knowledge itself: there is no intermediate step or feeling between the knowledge and the pleasure. Probably this cluster is the most specific or narrowest meaning of such phrases as "knowledge is an end in itself" and "knowledge for its own sake" and "the simple, mere fact of possessing that knowledge is my ultimate goal." Perhaps this cluster can best be summarized by imagining (because this did not actually occur in any of our interviews!) an adult saying, with a happy smile, "I know I will just like knowing about this subject."

At least 6 persons expected such a benefit from possessing the knowledge they hoped to learn. For one young woman, the most important reason for beginning the project was to learn about herself. She hoped, through attending a sensitivity training lab, to gain insight into how she reacts to others and how others react to her. At the same time, she was interested in learning about interpersonal relationships and group functioning.

The man who wanted to work out his own beliefs about the existence and nature of God expected great "personal satisfaction: from having an answer to "the most fundamental question in one's religion." The woman learning about the Vietnam war expected her benefit to come not only from a better understanding of the situation and its causes, but also from her increased understanding concerning a crucial question: "Must man continually kill his own kind?" These 2 persons seem similar in their strong drive to achieve certain basic understanding or perspective. One woman had learned about her neighborhood because "I am interested in knowing about the area." Two other persons expressed reasons that were almost identical to each other: one man's "satisfaction" would come from "knowing something I didn't know before -- something new," and one woman felt "satisfaction that I knew something new and different in the field (of music)."

The second sort of motivation occurs when the possession of certain specific knowledge and skill is part of the adult's image of his ideal self or of the ideal teacher, Christian, housewife, or other role. The adult may strongly want to become his ideal self (or at least a better self), or an ideal (or better) citizen, musician, parent, or whatever. If so, he may decide to close the gap somewhat by setting out to learn the missing knowledge and skill. His purpose is to please himself, not to please others: he expects to regard himself more highly after he gains the knowledge and skill.

Here are some actual examples of this sort of motivation for learning:

-- The question of the existence and nature of God is "a question that all Christians should have an opinion about."

-- One woman feels it is "good to widen horizons in any field," as though any new knowledge or learning is good.

-- "Speed reading is really a good thing to know."

-- A nurse wanted to feel "capable, up-to-date" and felt that for a nurse "these things were simply good to know."

-- "I think everyone should know about their own community."

-- Skill at sewing is "part of the wife identity -- it is a good thing for girls (young women) to know."

-- "It was just a good thing to know about these places (West Coast cities that are often in the news); it's just good general knowledge to have."

-- "This type of knowledge is just something that every parent should be aware of."

The most dramatic example of this cluster is the woman who learned to drive. She felt that "learning how to drive is something everybody should know," but was very reluctant to learn because of her fear and timidity. The conflict became more severe when she was given a car, and her friends began to tease her about owning a car (role of car owner?) and not being able to drive. Finally, to reduce her embarrassment and shame, she took lessons and obtained her license. "I guess the real reason I took those lessons was that my friends had kidded me so much that I really felt ashamed of myself for not knowing how to drive."[14]

At least one other person may fit into this cluster of motivation, although not explicitly stating such a reason. The woman who learned about Vietnam may have felt that any informed citizen should learn the background information about this major issue, or should at least "keep up with the news."

The third sort of reason is that the person may expect to feel more confident or self-assured when he possess the knowledge and skill. This self-confidence may be generalized, or may be felt only in certain situations (or may be felt whenever with other people, which is a very common but not universal situation).

No doubt the self-confidence sometimes comes from partially closing the gap between the ideal self and the actual self.

One example of expecting to feel more confident when possessing the new knowledge was a teacher who expected to "feel more confident because she knows about" a new method she was to use. Presumably her increased confidence would be present primarily at work rather than throughout her entire daily life.

The man learning speed reading expected his "self-assurance and confidence" to increase (presumably when contemplating reading, especially). The woman learning about modeling expected to "feel even more self-confident as an idividual" (probably throughout her daily life, or at least when with other people). A woman who increased her competence at managing a small newspaper expected to feel "self-assured about my own abilities."

15. Enjoyment from Receiving the Content (#8)

We come now to the last of the 3 reasons that consist of some pleasure or satisfaction arising directly from the content. That is, the enjoyment seems to inhere in this particular knowledge (for this particular learner), not in learning in general (in its efficiency, for example) nor in some useful application. The 2 reasons already discussed are the desire to satisfy puzzlement or curiosity (the pleasure will come when the learner finds answers to his questions) and the desire to possess or retain certain knowledge and skill. The third reason is the immediate pleasure while reading or hearing the content: the enjoyment occurs while receiving knowledge.

Because this enjoyment does not depend on retaining or remembering the knowledge, even for an hour or two, our definition of an adult learning project excludes any project in which this motivation was greater than the sum of all other reasons. Our definition states that the primary purpose of a learning episode must be to gain certain knowledge and skill and to retain it at least until the day after tomorrow.

Consequently, we regard this reason as a subsidiary motive, never the primary motive.[15]

Here is the wording[16] of the mimeographed description:

> 8. Sometimes a learner enjoys receiving the content or knowledge.
>
> For example, he may enjoy reading or hearing certain information or subject matter. Or he may like the mental stimulation of receiving new intellectual experiences, new ideas, and new approaches. Or he may like the stimulation of a variety of sights and sounds.
>
> In other words, he obtains some immediate pleasure from receiving the knowledge or subject matter.
>
> The benefits come directly from the content or information itself. For example, he finds it interesting, fascinating, stimulating, or enjoyable.
>
> He may receive the content by reading, listening, looking, or some other method.
>
> The enjoyment we are now talking about is distinct from any desire to remember the content. And it is distinct from a strong desire to find the answers to certain questions, or to reduce one's feeling of puzzlement or curiosity about some specific thing.

When one lists the content of the various projects in which the enjoyment of receiving that content was a strong reason, one is not surprised by many of the items. Much of the content is considered interesting by a large number of people. Indeed, probably you can recall examples of someone you know (or perhaps you yourself) learning with great interest or enjoyment about UFO's, educational television, golf, the tourist attractions of some city, anecodotes about individuals in history, himself and other persons, and new sorts of music. Other persons had a commitment to some career or major responsibility prior to their pleasure in receiving the content; examples of such content were the philosophical aspects of teaching, the validity of tests, the characteristics of a modelling career, and the principles of managing a newspaper.

In order to understand this reason better, we asked each person for whom it was a strong reason, "Why did you enjoy receiving this content? What aspects or characteristics of the content provided your pleasure?"

Several learners could answer only with a relatively vague term: the content was interesting or fascinating or stimulating.

The responses of other learners gave us a little more insight. Several seemed to enjoy the feeling of learning or discovering something that was new to them. A few liked the feeling of familiarity or recognition as they read the material: one (who also liked discovering new things) liked being reminded of similar historical content learned previously, and the golfer apparently recognized his own problems and feelings as he read about Ben Hogan. A few persons enjoyed receiving content because they liked the author or lecturer, or because he "made it interesting" or "made me think and ask questions." Each of the following responses was made by only one learner: enjoyed the feeling of going deeper and deeper into a topic (UFO's); felt pleased at getting "sound knowledge;" felt the content (ETV) was very important for society and education; was pleased the content was not too difficult; and found the content challenging and "intellectually stimulating."

For only 2 or 3 persons did the enjoyment while receiving content seem to depend much on the method by which it was received. Most persons learned by reading, but a few also learned through a class or lecture or T-group, through conversations with other persons, or through observation. One man took lessons with a golf pro.

In almost half of the projects, the strength of this reason clearly increased after the project began. The most dramatic indication of this is the fact that this was a very strong reason for beginning only 3 projects but for continuing 12. Apparently many persons begin a learning project with little expectation of being motivated by pleasure in receiving the content, but then find themselves interested or stimulated.

16. A Comprehensive Comparison

Before examining the next reason, let us compare the 3 reasons just discussed with three of the reasons that involve using the knowledge and skill. The 3 reasons just discussed seem to be instances of intrinsic motivation arising directly from the knowledge itself.[17] The person expects to find satisfaction when an answer is obtained (#6), after the knowledge is possessed (#7), or while receiving the knowledge (#8). The second, third, and fourth reason in the interview seem quite different from this. In each of them the knowledge or skill was being gained in order to be used in accomplishing something in the world around the learner: any satisfaction would come from such use, not merely from gaining or retaining the knowledge.

Several general findings emerge when we combine the quantitative data for the 3 reasons involving some use, and compare them with the data for the 3 reasons involving pleasure from the knowledge itself.

First, every one of the 35 adults was motivated by a reason involving use, and all but one by a reason involving pleasure from the knowledge itself. Apparently it is rare for an adult to learn exclusively in order to use the knowledge and skill or exclusively because of affective benefits inherent in the knowledge itself. That is, most adult learning projects are begun and continued because of the combination of both sorts of reasons.

Second, the two sorts of reasons are strong (very strong or fairly strong) in approximately equal numbers of projects. Each sort is strong for beginning about 87% of the projects. For motivating the continuation of the projects, the reasons involving use are strong in 94% and those involving pleasure from the knowledge itself in 80%.

Third, this tendency for factors involving use to be more important becomes much more evident when we look at the reasons that were most important for beginning or continuing the project. Whereas a reason involving use was the most important one in about 70% of the projects, a reason involving pleasure from the knowledge itself is most important in only about 20% (for beginning) or 30% (for continuing). Clearly, then, the primary reason for the majority of adult learning projects is the expectation of using the knowledge and skill.

17. Enjoyment from Practicing the Skill (#9)

In both the previous reason and the present one, the learner obtains some immediate pleasure or satisfaction during certain learning episodes. There is one clear distinction, however. In #8 the learner receives content during the learning episode. In the present reason, he performs the activity in which he is trying to improve his skill.

Here is the detailed description:

9. Sometimes a learner enjoys performing the activity in which he is trying to improve his skill.

In other words, he expects some immediate pleasure or satisfaction because he is performing this skill or activity.

We include only learning episodes. That is, we include the expected enjoyment only during episodes in which his primary goal is to improve his skill in the activity being performed or practised.

Some possible activities in which he might be trying to improve are playing a certain sport or game, chairing a committee, painting, interviewing people, dancing, playing a musical instrument, performing some responsibility.

> The satisfaction or pleasure comes directly from some essential or usual aspect of the activity. For example, he may enjoy the exercise and challenge of playing tennis.

This reason was present in only about one-third of the projects, probably because it can be found only in a project in which practising a skill is a major learning activity. Many projects do not involve a skill, or at least involve only a few learning episodes devoted to improving that skill.

This reason, like the previous one, is usually a subsidiary reason. Only rarely would our definition be satisfied by a learning project in which this reason was stronger than the sum of all the other reasons.

This reason is similar to #8 in another way, too. Half the learners for whom it was a relevant reason found that its strength increased after the project began. Apparently it is common for an adult learner to find that he enjoys practising or performing some activity, and for this enjoyment itself to become part of his motivation for continuing the learning. Several learners found their enjoyment became strong after they had been performing the activity long enough to become fairly proficient or correct.

Most learners could not tell us precisely why they enjoyed performing the activity, and used general phrases such as the following: it was just fun; it feels great; thoroughly enjoyed it; new and different; a challenge. The opera singer liked being part of something that was creative and that was possibly unique.

The skills that the learners enjoyed practising were golf, interviewing potential employees, singing and acting in an opera, producing electronic music by operating various machines, posing while a fashion model, proofreading, making bound buttonholes, sewing, and understanding oneself and others in a group and operating effectively in that group.

18. Feeling of Learning Successfully (#10)

Another reason, important for continuing but not for beginning many projects, was defined as follows:

> 10. Sometimes, during a learning episode, a person is pleased or "feels good" because he is learning well or successfully.
>
> He has proved to himself that he can master this knowledge and skill. Or he has faced the challenge of planning and conducting his own learning, and he feels victorious because he progresses well.
>
> In short, the learner is pleased by the effectiveness or speed of his attempt to learn. He enjoys meeting a challenge, and feeling successful as a learner.
>
> This is an immediate feeling or benefit while learning. It is separate

> from the pleasure of realizing that he will now possess the knowledge and skill, or be able to use it. It also is distinct from proving to other people that he can learn.

As the last sentence points out, this reason is pleasure arising directly and immediately from one's own success at learning. It is distinct from reason #5, which was pleasure from someone else being aware of the learning.

Few of the details provided by the interviews added much to, or modified, our original definition. Several persons simply said they were pleased or satisfied when they realized they were learning quickly, easily, or successfully.[18] Two of these said that they liked to succeed at everything they do.

Some interviews were useful, however, in providing concrete examples. One woman was pleased to find she was sensitive enough to learn effectively in a T-group. Another woman was pleased to meet the stimulating challenge of learning about a field of music so new that not much is known or written about it. Another was especially pleased by the effectiveness of her learning, because she found that directing her own learning was quite a challenge. Another received the positive feeling from noticing progress in overcoming her fear of driving and her lack of coordination because she thus became "much more confident in herself, as a person as well as a driver."

As one would expect, this reason was very strong or fairly strong for continuing several projects (indeed, half of them), but not for beginning them. The interview data indicate that not one of the 35 learners was really influenced by this reason while deciding whether to begin the project. For many, though, it was early in the learning, or at least by the mid-point, that this reason increased their desire or willingness to begin a learning episode.

19. Pleasure from the Activity of Learning (#11)

We cast the following net in hopes of catching one or two small fish, and were astounded to catch more than half the fish in the lake!

> 11. Sometimes a person feels satisfied or happy because he is trying to learn. He feels pleased that he is learning at this particular time instead of engaging in some other activity.
>
> Perhaps he is pleased whenever he can find time for learning, and feels unhappy if several days pass without some effort to learn something. Perhaps learning is almost a habit or hobby for him.
>
> Here are some examples:
>
> -- he enjoys reading, and tries to set aside some definite times for this activity;
> -- he thinks more highly of himself when he is learning; he feels he is doing the right thing;

-- **he enjoys the adventures and problems that a learner experiences;**
-- **he enjoys exercising his mind, and does not want it to become stagnant.**

We did not feel completely clear and confident about this reason, but felt we had to develop and include it because of a few examples found in the exploratory interviews and the literature. Three or four respondents, too, found it slightly vague, but half of all respondents said it was very strong or fairly strong in their learning project. The qualitative details support most of these responses.

When asked to tell us about this reason, most reacted initially with enthusiastic but imprecise phrases such as I like to learn, I enjoy learning, learning is fun, learning makes me feel good, learning gives me satisfaction or fulfillment. A few then said that learning had been a major activity during most of their lifetime, or was now almost a habit. One woman said that she sets aside time for learning, and would have learned something else if not sewing. This broader context of learning projects is discussed in Section 23.

Some persons did mention some details of their immediate pleasure from the activity of learning. They liked this activity because it was different from their routine activities, it relieved or prevented boredom, it stimulated the mind, it was pleasant or fun, it provided the enjoyment of discovery, or it usually involved something new. Most of these benefits seemed to depend on learning (they could not have been obtained from some other activity), but none seemed to depend on any particular subject matter.

The other major reason[19] seemed to involve the learner's perception of himself and his regard for himself. Several statements indicate the person regards himself as a learner. Two women, for example, perceived themselves as "not just a dull housewife," and one man said "learning is part of my whole philosophy. If I wasn't learning, I just wouldn't be very satisfied." Several persons seemed to engage in the activity of learning in order to increase their self-esteem. Said one, "I think more highly of myself when learning." Said another, "Everyone should constantly be making an effort to learn something." Probably related to this is the statement by another person that his satisfaction came from a sense of putting his time to good use, of doing the right thing.

It seems clear that it is common for part of the motivation for learning to be the pleasure arising directly from the activity of learning: some people just like learning, or like themselves better while learning. Perhaps this is part of the meaning of the phrase "learning for the sake of learning."

Before moving on to the final 2 reasons, we should check that we are clear about the distinction among four earlier reasons that seem similar because each involves perception of self. Reason #5 was the adult's desire for other people to regard him as a learner or a successful learner. Reason #7 was to regard oneself as having learned, as having reached a certain level, of being full of knowledge on a certain topic. The 2 reasons just discussed differ from the earlier two by dealing with the learner's own conception of himself (as a learner, or a successful learner) and by dealing with the current activity of learning rather than with the resulting end-product of knowledge.

20. Completing Unfinished Learning (#12)

The wording of the twelfth reason was as follows:

> **12. Sometimes a learner begins reading a certain book as one step toward gaining the knowledge and skill. Then, as he reads the book, he may find that completing it has itself become a goal.**
>
> **Or, after he has begun some topic or phase that is one step toward the total knowledge and skill, he may develop a need (or feel a commitment) to complete that topic or phase.**
>
> **Or the act of beginning the entire learning project may itself create a desire to carry it through to completion.**
>
> **In other words, the learner's desire to complete something once he has begun it turns out to be one sort of motivation for continuing the learning. If he stops before completing this phase or reaching a certain level, he will feel he has failed or quit.**
>
> **This factor occurs within the learner; it does not depend on the reactions of other people.**

This wording failed to communicate my conception accurately to the two interviewers and to at least 18 of the persons they interviewed. One essential element in my conception of this reason is that the person's commitment to complete some aspect of the learning arises because he has started it. He decides to start it for some other reason, and then discovers that the desire to complete this aspect itself becomes a reason. Part of his motivation is simply to finish this aspect in order to feel he is not quitting or failing or leaving a task unfinished. This feature was not communicated to several of the learners, however. Their detailed responses clearly show that, although they had a strong desire to complete the learning or to learn a great deal, this motivation did not arise because they wanted to finish something once they had begun it. Their desire to learn was present even before beginning, or their interest or curiosity (but not their commitment to "complete" something or to avoid quitting) increased after they began.

The other essential element in my conception of this reason is that the person develops a desire to complete some aspect of the learning, such as a certain book, topic, or stage. Several persons, however, responded positively to the mimeographed description because of their strong commitment to completing their action project or action goal, or to completing their efforts to become a more competent teacher or model. Their responses merely pointed up the strength of their desire to use the knowledge and skill, but did not reflect any additional reason not already covered.

The detailed responses of 18 persons indicate clearly that they responded positively only because the wording had failed to communicate a sufficiently precise or narrow meaning. Consequently, their responses have been omitted from the data.

Let us now turn to the 5 persons for whom this clearly was one reason for learning.

Two of these persons took a course, one in sewing and the other in speed reading. Their reports were remarkably similar. They both reported feeling a fairly strong commitment to finish the course immediately after their application had been accepted. (One simultaneously paid a fee of $150, and found that this also was "one reason I wouldn't quit.") Both said that the desire to finish anything once it was started was typical of their behavior, and both wanted to reach the level of skill that would be achieved by the end of the course: one hoped to reach the level predicted by the instructor, who said his reading speed could triple. Clearly, then, for some persons, one benefit of beginning a course is the increased motivation provided by the desire to complete that course. Many adult learners, and many faculty members who advise graduate students regarding suitable optional courses, are already aware that some persons feel a great reluctance to drop a course after beginning it, even when it turns out to be clearly unsuitable.

The other 3 persons, too, were influenced by the desire to finish something. The woman learning about electronic music reported that she wanted to quit several times, but continued the learning because "once you start something, you should finish it." Another woman felt that much of her learning "was left undone" and there were still questions to be answered, even after her supervisors were satisfied with her report and recommendation. She continued exploring the topic by choosing it as the subject of her master's thesis. A third person reported that every time he found a significant idea during his project, he pursued it in order to find out more about it. Also, every time he began a book that was relevant to the project, he wanted to complete it.

21. Unconnected Benefits (#13)

Finally, we wanted to learn about the importance of benefits not directly or necessarily related to the specific content and learning activities of a project. That is, certain subsidiary benefits of some learning projects, such as companionship and a change in routine, could be obtained through certain activities other than learning. The importance of such benefits was pointed out by Houle (1961). Studying adults conspicuously engaged in education, he found some who were primarily activity-oriented: they "take part because they find in the circumstances of the learning a meaning (benefit) which has no necessary connection, and often no connection at all, with the content or the announced purposes of the activity (p.16)."

We also tried to include most of the meaning from two[20] of the five orientations to learning found by Sheffield (1964).

Here is the wording we used:

> **13. A learner may expect to find some benefit in the circumstances of the learning episode that have no necessary connection with the content or the learning activities. That is, the same sort of benefit could be obtained from some other activities or content, too.**
>
> **Here we exclude the benefits described on previous sheets. We also exclude any benefits from actually obtaining the knowledge and skill. Here we mean that while performing the learning activities (or because he performed them) the person obtained some pleasure or other benefit.**
>
> **Here are some examples:**
>
> - **conversation just before or after a class**
> - **a chance to meet people in the bar after a game**
> - **a quiet, peaceful atmosphere away from the family while reading**
> - **desire to accompany one's spouse**
> - **companionship while sitting in an audience with a friend**
> - **an excuse for getting away from the house for a while.**

Clearly this reason could not be stronger than the sum of all other reasons for beginning or continuing a learning project. If it was, the primary purpose for beginning each episode would not be the desire to gain and retain certain knowledge and skill, as required by our definition of a learning episode.

Twelve persons found this reason present in their motivation, and most of them found that it was very strong. Almost all[21] of these 12 responded affimatively, however, when asked "could the same benefits have been obtained just about as easily and efficiently from some other activity?"

Almost all of the 12 had benefited from the association with other people. They said their learning project provided opportunities for companionship, talking with people, meeting new people, making good friends, or feeling a special closeness with one or more persons because learning together.

A few persons benefited from the change in activity. For example, they were glad to "get away from the house" (one woman went to a library), or enjoyed reading alone. For two or three, the learning project provided the opportunity of travel (to attend a course or T-group, or to visit schools of nursing). And one woman felt she was paid to learn in the sense that her travel expenses for a three-day course in Ottawa were paid.

Incidental reasons for learning may be far more important in groups and classes established by educational agencies than in individual adult learning projects. The latter, by definition, require at least 7 hours in which the primary intention is to learn certain subject matter. The former may attract some people seeking primarily companionship, new friends, or escape from the home.[22]

22. Other Reasons

Near the beginning of the interview we asked each person to jot down, for his own use, his response to the following question: "Why did I want to learn the knowledge and skill? Why did I begin and continue the learning project? Some of my reasons, intentions, or expected benefits were: (blank)." At the end of the interview we returned to this question, and asked the person to check his answer "to see whether all of the reasons you jotted down have been covered. Are there any reasons at all that we haven't discussed thoroughly while looking at these various sheets?"

Most persons said there were no additional reasons. Only two new ones emerged.

One, expressed by the woman learning about unidentified flying objects, was "maintaining interest in what is going on." This may be a combination of several of our reasons (for example, 1, 6, 7, and perhaps 5), or it may add something new. Many human beings in Western nations spend at least an hour or two each week listening to news broadcasts, reading a daily newspaper and perhaps a weekly news-magazine, and discussing current events in casual conversation: perhaps part of their motivation is "to keep up with what is going on in the world."

The other possible new reason that emerged was expressed as "keeping up with my husband." This might mean only trying to impress her husband with her learning (our fifth reason, which she did say was very strong). Or it might add the desire to maintain the same pace as one's spouse, especially in learning, because of some inner motivation rather than a desire to impress the spouse. For example, a person might feel challenged to learn a great deal because of the model or encouragement or stimulation of the spouse's learning. Or a person might feel that the spouse of a high-learning adult should also try to learn a great deal.

Two other possible reasons for learning were discovered in a study about books and reading, after our interviews had been completed. Ennis (19) found, on the basis of interviews with adults, that the uses of books could include "the search for personal meaning, for some kind of map to the moral landscape" and "to provide support in some personal crisis (p.25)." An actual example of the second was a college student who read religious books after his mother's death.

23. The Broader Context

Within what broader context does a learning project sometimes begin?

Three general questions

Some perspective regarding this broader context was gained by asking three general questions at the end of each interview. One of these was sparked by a guess that sometimes a person may have some free time or a general desire to learn *something* (anything), and then may decide just what to learn. This is the third possible pattern outlined in Section 4. A person might, for example, set aside every Sunday afternoon for learning something or improving his mind somehow, or he might be meeting the requirements of some educational institution.

We asked each person, "Did you decide to learn *something,* and then choose this particular thing to learn?" Only 3 persons said *yes*, and each of them took a course as the primary learning activity. Two of them apparently take one non-credit course every year: their decision to begin the learning project selected in the interview seemed to consist primarily of deciding *which* course to take that year. The third person, too, was apparently looking for something to learn: his interviewer described him as "a middle-aged man who has carried out many learning projects throughout his life. He appears to have an insatiable curiosity about numerous things that he happens to stumble into."

A second comprehensive question about each learning project was the following: "Did this particular way of improving yourself grow out of your general desire to improve yourself?" About half of the 35 adults said *yes* and about half said *no*. Perhaps, for at least some persons and projects, a comprehensive long-term desire to improve oneself or to become a better person is an important underlying motivation. A similar desire was pointed out earlier. Some persons, when discussing some reasons, indicated that they were motivated by their conception of their ideal self (as a wife, learner, or successful learner, for example), or were trying to come closer to that conception (by learning a certain skill or certain knowledge).

Third, it seems likely that, for some persons at least, deliberate learning is such a common activity that it might be regarded as a normal, natural activity for that person. When such a person initiates a particular learning project, we must view this decision in the context of his long-term pattern of behaviour.[23] Consequently, in order to gain a crude estimate of how common such persons are, we asked, "Do you *often* begin a learning project? Are you usually in the middle of learning two or three different things?" All but 4 of the 35 persons clearly responded affirmatively.

Additional speculation

Some additional speculation about the broader context of learning projects was stimulated by another study in which several adults were interviewed about their patterns of continuing learning.

Some of these adults seemed to want variety: they wanted some knowledge of various areas of subject matter rather than a deep knowledge of any one area. A few of their statements reveal the strength of this motivation. One said, "I want to try everything. I want to glimpse into everything." Another said, "I just can't do the same things over and over again." A woman who had taken 34 courses at a YMCA described herself as "almost insatiable."

It seems clear that some individuals move fairly often during their lifetime from one area of activity to another. Even within one area of subject matter a person may move from one aspect or activity to another. At various times during his life a person interested in music, for example, may attend musical performances, listen to records, sing, play two or three different musical instruments at home, and play in one or two different groups. One person described his wife's pattern of learning as follows: "She goes on binges.... For a while she studies Spanish and then she studies Russia and then she studies ancient Egypt or something like that. She develops an interest and reads in that one field until she gets her fill of it and then she's off to something else."

This statement also points up the importance of reading. For some individuals, the immediate pleasure from the activity of reading (even of non-fiction) may become an end in itself. Reading may cease to be primarily a means or tool used for the goal of gaining knowledge. One 54-year-old man read a great deal but no longer tried to remember the content of his reading, and did not seem to care much just what he read. This man compared his enjoyment provided by reading to that provided by eating pie. Another man, too, compared the great satisfaction he felt while reading to the satisfaction of hunger.

One final hunch: does an intelligent mind tend to be an inquiring mind? Because it is an intelligent mind? Clearly a child tends to use his capacities and powers: he finds great delight in just being able to walk, run, ride, climb, and talk, and may consequently perform these activities many times. Perhaps a very intelligent adult tends to read or learn in a variety of subject matter areas partly because of the joy or pleasure he receives from using his mental capacity.

24. Benefits and Costs

When deciding whether to begin a certain learning project, a person may estimate and compare the probable costs (time, money, and negative emotions) and benefits of gaining the knowledge and skill. He may ask, "What will I get for all the time, effort and money I invest in the learning?"

Starting with an action goal

We have already noted that a large proportion of learning projects arise because of a commitment to some action goal. The person first decides to make something, plan something, or do something; he then decides to gain certain knowledge and skill in order to do so at a certain level. This is the first of the three patterns outlined in Section 4.

Section 10 pointed out that almost all of the learners could have achieved their action goal, at least at a low or minimal level, without bothering to learn: indeed, most of our daily efforts toward action goals are performed without learning immediately beforehand, especially if we have previously performed the task successfully. For the action goal discussed in the interviews, however, each person did decide to learn. Each wanted the satisfaction or confidence or praise that would come from performing the action at the higher level made possible by the new knowledge and skill.

While considering the decision to learn, some persons probably thought carefully about the probable costs and benefits, and probably tried to calculate them fairly precisely. The costs might include the number of hours required for gaining the knowledge and skill (and for planning and arranging for the learning), any money that was spent on books or lessons, a variety of negative feelings (such as frustration, fear of failure to learn successfully, chagrin from being teased about learning), and physical discomfort such as tired eyes. Perhaps these costs could be expressed in some sort of unit such as dollars, hours, units of pain-pleasure, or units of benefits-costs. If so, the sum of the costs would be subtracted from the sum of the satisfaction, confidence, lack of frustration, time and money saved, and other benefits of the learning.

Such a calculation might be used not only to decide whether to begin a learning project,[24] but also to decide how much time to spend at the learning. If he spends too little time at the learning, his performance or product may fall below the desired level.[25] He may, instead, spend too much time at the learning in the sense that his cost may become greater than his benefit; that is, additional hours or efforts may produce little or no increase in his performance, his satisfaction, or even his confidence.

Some learning is preparation for performing an action that may or may not ever be necessary. Artificial respiration and other first aid techniques are clear examples of this: the person might use such skill the day after learning it, ten years later, or never. In deciding whether to invest time in learning this sort of knowledge and skill, the learner might multiply the benefit or importance of using it (if he ever does so) by his estimate of the probability of using it. Unless the person is influenced by other factors, the potential benefit would have to be very great (for example, saving the life of his child or spouse) if the probability of use is very low, unless the cost is not very great (only a brief time, which he can easily fit into his schedule). The thinking outlined in this paragraph seems to be merely a particular application of a general theory of motivation which expresses the strength of motivation as the product of the probability or expectancy and the importance or value.

Starting with a desire to learn one or more things

A second common pattern of events (Section 4) begins with the person becoming puzzled or curious about some question or phenomenon, or wanting to possess (retain) certain knowledge and skill for some reason other than using it. Either of these reasons for wanting to learn could be sparked by a conversation, printed matter, or announcement about the subject matter.

As a result of one of these events, a person may begin learning certain knowledge and skill. If he expects to enjoy each learning episode, and if he is not pressed for time, he may not include the number of hours as part of the cost: he will simply subtract any other costs from the expected benefits, and will begin learning if the difference is above zero, or is sufficiently great.

Alternatively, the person may include the required time as one of the costs. In particular, he may calculate the alternative benefits and pleasures that will be lost if he spends the time on the proposed learning project. That is, the value of the time depends on what else could be done with it. This may help to account for learning projects begun by persons with a great deal of free time, such as a person in a prison or in a remote army post (as Winston Churchill was in his early twenties). In calculating the benefits of alternative uses of time, the person might have a written or mental list of possible activities, with an estimate of the net benefit of each.

Let us look at two ways of calculating which activity has the highest net benefit. We will use the same three activities in each procedure. All figures will indicate some arbitrary cost-benefit unit.

Although few if any adults precisely calculate costs and benefits in this manner, their thinking may generally follow this format. Some adults do have a list of projects they would like to begin, and set priorities among them. Although the interviews in the present study were not designed to study this matter, some responses did provide information about how deliberately the person had considered the question of whether to begin the learning project: some learners indicated that they had thoughtfully compared the benefits and the costs of the learning before deciding to begin.

In the first method of calculating or thinking, the starting point is time. The person has a certain number of hours, and is deciding what to do during that period of time. Consequently, time as a cost is equalized: these calculations are the costs and benefits per hour.

Activity A : benefit of 20 minus cost of 10 equals net benefit of 10.
Activity B : 25 minus 10 equals 15.
Activity C : 18 minus 6 equals 12.

The person would choose Activity B.

The second method of calculating, using the same three activities, is more complex because it includes the highest alternative uses (the net benefit calculated in the first method) of the time as a cost, because this benefit is lost by spending the time on the given activity. Again, the calculations use arbitrary units to show the benefits and costs per hour.

Activity A : benefit of 20 minus cost of 10 minus the lost net benefit (of alternative Activity B) of 15 equals -5.
Activity B : 25 minus 10 minus the lost net benefit (of alternative Activity C) of 12 equals 3.
Activity C : 18 minus 6 minus 15 equals -3.

Again the person would choose Activity B.

Either method of calculation gives essentially the same result, and points out that the chosen use of the given time is expected to provide a greater net benefit than any other activity considered by the person.

This ideal formula might be modified by various factors in real life. For example, translating the cost units (including hours) into dollars, would the person begin a learning project costing $10 for which the benefit would be fairly small, a $31 project with a large benefit, or a $325 project (60 hours and 25 dollars) with a very great benefit?

Also, when hours are included in the cost rather than being equalized, a ratio may be more meaningful than a difference. Knox (1967), for example, talks about the perceived cost-payoff ratio of a given adult education activity. He states the matter thus: "Based on the values that the adult assigns to time, money, effort, status, satisfaction, and enjoyment, will the adult education activity return more of what he wants in relation to what he must invest, than would be the case for alternative activities (p. 37)."

Spending the two resources of time and money may have certain similarity. For example, large amounts of each are spent without much thought, (perhaps in habitual ways), or at least without comparing the possible benefits of alternative uses. Then, when the supply of money or time becomes clearly limited -- when the person is down to his last fifty dollars or the last day of his vacation for example, -- these remaining amounts may be spent more thoughtfully, or according to carefully established priorities.

Benefits in the distant future

Several situations seem parallel in that each one offers large rewards in the distant future if a decision to invest, give up, sacrifice, or spend certain resources is made now. The slogan of these situations might be "Invest now, benefit later." Here are some examples:

1. an individual invests time and perhaps money in learning because he expects to save time and money in the long run, or expects some other benefit in the future;
2. a government puts some resources into fact-finding (by freeing a

key decision-maker to learn and think, or by setting up an inquiry commission) in order to save money by making a better decision;

3. a government invests resources in the education of youth or the retraining of the unemployed because of the benefits to society expected in the future;

4. a researcher, and his sponsors, expect the time and money spent on the research to provide an eventual payoff that is much larger than the investment;[26]

5. an individual gives up some present consumption in order to save his money for some greater future benefit;

6. a nation, to develop economically, must produce "excess" food which can be used to feed the individuals who are building up the prerequisites of technology such as railways and factories: the people must save or sacrifice now for the future benefit of themselves or a later generation.

Inaccurate estimates

Sometimes a person makes large errors in estimating the probable benefits of a certain learning project, or in estimating the amount of time, effort, and money required to learn a certain knowledge and skill. Sometimes, too, his errors apply to the action project, and thus indirectly to the learning project. Often, for example, either the learning project or the action project turns out to be much more complex, detailed, demanding, or advanced than the learner expected. Three actual examples of this in a small unpublished study were a man learning to manage a home aquarium, a woman learning to take movies on two trips, and a woman learning to sew. Sometimes, too, a learning project will have certain unexpected outcomes. These may be good, bad, or neutral. One person who learned to play a recorder found that his circle of friends and his use of leisure time changed far more than he had anticipated. A person learning certain knowledge without thought of action may find that the knowledge does in fact compel him to act: he may decide to fight a social problem that he has learned about, or he may join a certain organization, or he may teach a new course or write an article, or he may add a new mission or goal to his life.

Stopping

Several learning projects had ceased or tapered off by the time of the interview, and we asked why this had happened.

Some learners stop a particular learning project when they have achieved what they set out to achieve. For example, the man learning about computers in order to prepare a set of recommendations for his company reported that he had reached a level of understanding sufficient for writing the report. Two persons taking non-credit courses (speed reading and statistics) felt that they had learned enough by the end of the course, and another person received her driving license. Another person found that the course she took provided the wrong knowledge and skill: she realized that she should have learned certain other knowledge, instead, in order to have achieved her action goal. The others apparently found other activities or responsibilities more urgent than the learning project, and reluctantly let it stop or taper off.

A learning project might stop prematurely if the person found that the costs were much greater than he had estimated: the net benefit might thus be reduced to zero or to a figure below that of other possible uses of the time. Consequently we asked each person whether he had abandoned the learning project because of finding "that the learning activities required far more time, effort, money, or patience than you had predicted." No one said yes.

It might turn out instead, of course, that the benefits were overestimated. Or the value of the benefits might decrease (or the value of the benefits of other activities greatly increase), or the desire for the knowledge and skill decrease for some other reason.

A person also might stop prematurely, despite strong motivation, if he could not overcome some barrier. For example, he might find that he lacked the ability to learn the desired knowledge and skill. Or he might be unable to figure out a strategy for learning it. Or he might be unable to find or obtain resources that could provide the subject matter.

Deciding whether to continue or stop a learning project was one of the self-teaching tasks studied by Tough (1967). He found two categories of learning projects in addition to those just discussed: "learning about a broad topic ... or a general skill ... with no specific desired level in mind" and "learning about their first child (p. 68)."

Lack of clear goals

Not all persons have clear goals for all learning projects. On the contrary, this section of the report has so far been rather one-sided in apparently assuming that most adults sit down and assign units to all the probable costs and benefits before embarking on a learning project!

In fact, many persons seem rather sleepy in life. Their motivation is vague, they are not really aware of themselves and of the consequences of their decisions, and their learning projects lack clear goals. Some adults begin some learning projects or read some books or keep up with the news simply because of their assumption that this is "the thing to do."

Many adults not only fail to set goals, but also lack skill and perhaps experience in doing so. Tough (1967) found that 42% of his subjects experienced some difficulty and concern with the task of choosing the goal, and many received a large amount of assistance from several persons while performing this task.

25. Learning Because of Crises and Changes

One explanation sometimes proposed for adult participation in educative activities or learning projects is the impact of crises, role changes, major developmental tasks or transitions, and other major changes in the life or development of the adult. That is, the stability and equilibrium of adult life is occassionally punctuated by a major change in the adult's life circumstances, such as a new job, marriage, child birth, moving to a new neighborhood, and buying a house.

To obtain a crude estimate of how many learning projects are begun because of a major change in the adult's life, I asked myself the following question concerning each learning project: was it, or was it not, clearly begun largely in anticipation of a major change, as part of such a change, or as one result of such a change? For one third of the projects, the answer was clearly yes. These learning projects consisted of 8 that were begun in anticipation of a new job, or within a year or so after starting a new job; 2 begun in anticipation of becoming a graduate student, or shortly after becoming one; one involving a skill (sewing) being learned partly in anticipation of being married; and one at the beginning of a major new leisure-time activity. For the other 23 projects, except for 2 that were difficult to classify, the answer was clearly no. Each of them was simply a part of an on-going job, responsibility, leisure activity, or family life, or were prompted by relatively minor changes.

26. Summary of Findings

The single most common and most important reason for adult learning is the desire to use or apply the knowledge and skill. The commitment to an action goal (producing something, accomplishing something, doing something) comes first: then comes the decision to learn certain knowledge and skill as one step toward achieving the action goal more efficiently or more successfully. The action goal may be understanding some future situation better, passing an examination, or imparting the knowledge and skill, but these were not so common as other action goals such as producing a report or recommendations, or performing some other responsibility or task with a high level of competence.

The overwhelming importance of learning in order to use the knowledge and skill has been found by other investigators, too. Johnstone and Rivera (1965), for example, after an intensive national survey in the United States, declared that "it was quite clear from the results of our study that the major emphasis in adult learning is on the practical rather than the academic; on the applied rather than the theoretical; . . . subject matter directly useful in the performance of everyday tasks and obligations (p. 3)."[27] A study in the United Kingdom (Robinson, 1965) found the same emphasis:

> The great majority of adult interests (i.e., potential educational interests) does not arise from some academic or intellectual curiosity,

> but from the personal, practical needs of everyday life. Most people, in other words, do not at some stage decide that they would like to know more about economics or psychology: they are concerned about how much it will cost them to redecorate their homes or why their children behave in the way they do. These interests may well lead them quite far into economics and psychology, but they will start with concerns of a personal kind (p. 181).

Robinson noted that there clearly was a lack of widespread interest in formal bodies of knowledge, and that university extramural (extension) programs provide "pre-existing bodies of knowledge" which are not relevant to the interests of most people.

Houle (1961) distinguished the goal-oriented adult learner, and summarized this reason for learning by this statement: "Knowledge is to be put to use, and, if it is not, why bother to pursue it (p. 16)." Sheffield (1964) and Flaherty (1968), using factor analysis, found two sorts of goal orientations: in one the knowledge and skill is to be used in achieving a personal goal, in the other for a societal or community goal.

All in all, then, it is clear that much adult learning is very practical. When one reflects on the 35 learning projects recorded here, it also seems clear that there is nothing wrong with learning for practical reasons: we should be careful to avoid assuming that "good" adult learning occurs only because of a thirst for knowledge, a seeking after truth, or some such thing. In fact, the simple-minded distinction between liberal learning and vocational or practical learning seems a little absurd: many of the 35 learning projects displayed elements of both.

It is possible that our findings add a little more understanding to the relationship between powerlessness and knowledge or information seeking.[28]

The second largest number of adult learning projects began as a result of puzzlement, curiosity, or a question. A high proportion of these topics were major issues or highly controversial issues, or were especially important in the life of the learner for some other reason.

Each of the following reasons was strong in at least one-third of the learning projects:

-- pleasure in the activity of learning (feeling it was the right or best or most enjoyable thing to be doing at the given time);

-- enjoyment from the content itself, while receiving it, because it was interesting or stimulating;

-- a desire to possess or retain the knowledge and skill, apart from using it.

Five other reasons were less influential, though all were strong in at least a few learning projects:

-- enjoyment while practising the skill;

-- pleasing or impressing some other person by learning, or by learning successfully;

-- one's own pleasure or satisfaction from learning successfully, apart from the reactions of other people;

-- companionship or some other benefit not directly connected to the particular knowledge and skill;

-- feeling an internal commitment to complete a course or other learning activity once it has been started.

27. Implications for Researchers and Practitioners

Implications for the researcher and theorist

Some or all of the 13 reasons may be useful for researchers interested in studying why adults learn. Those who study motivation for participation in adult education programs, for example, might use some of the 13 reasons, or combinations or modifications of them. Apparently some distinctions and reasons not discussed previously in the literature have been developed and tested in the present study.

The researcher and theorist interested in participation in adult education programs might also consider the possibility of regarding such participation as part of a larger phenomenon. That is, taking a non-credit course is often merely one of the methods used by an adult in order to gain certain knowledge and skill: it is merely one part of his total learning project. Consequently, studying his reasons for beginning that learning project (or for wanting the knowledge and skill) might provide more meaningful and useful insight than his reasons simply for taking the course.

Finally, those studying some quite different questions about adult learning may find the distinctions useful. That is, one may have to distinguish two or more different types of learning (according to the reasons for beginning and continuing) before one can obtain meaningful answers to certain research questions. In our own current inquiry, for example, we have found it necessary to use all 13 reasons in order to distinguish real-life learning from academic-artificial learning.

What influences behaviour?

What is it, in a person's mind, that influences his decision to learn? Indeed, what influences most human behavior and decisions?

Three answers seemed especially strong in this study:

-- the person's major conscious goals (what he is trying to do or accomplish or get);

-- a major question (something that puzzled him; a phenomenon he notices; a research question or philosophical question that he poses; the way in which he specifies a problem);

-- his perception of what behaviour is appropriate, normal, or desirable in the given situation (including his perception of what sort of person he is, what sort of person he would like to be, and how others will react to certain behaviour).

implications for those who help children and adolescents learn

The findings of this study suggest a few implications for the school teacher, college instructor, parent, club leader, or other person responsible for helping children and adolescents learn.

First, it helps them understand what sorts of reasons may motivate the current learning of a child or adolescent. Children and adolescents learn a great deal, much of it as part of their school program (curricular and extracurricular), much of it as part of their home, club, peer, and other activities. Probably several of our reasons are useful for understanding why children and adolescents begin and continue their learning, especially their real-life learning rather than compulsory or highly structured learning in a school or similar agency.

For example, even before a child can read he astounds his parents with the number and range of his questions, clearly motivated by puzzlement and curiosity. Also, the learning of the pre-school child is often motivated by his feelings of success and progress in physical and mental skills, by his enjoyment in practising the skill, and by his desire to please or impress others with his successful attempt to learn. After learning to read, the child or youth may be motivated by his enjoyment while receiving the content and perhaps by his desire to possess certain knowledge and skill. In adolescence as in adulthood, probably one of the most common reasons for deliberate learning is the desire to use the knowledge and skill: to become a better football player, a better dancer, or a better guitar player; to build something, collect something, accomplish something, win something, or teach something.

In addition to increasing our understanding of a youth's current learning, our findings suggest some rather interesting possible implications when we consider the youth's future learning. Soon he will leave or complete secondary school or college: soon the motivation and pattern of his learning will shift toward those of adult learning. Our findings give some insight into the sort of future learning for which we are preparing adolescents.

If schools and colleges and youth organizations take seriously their aim of preparing adolescents to be effective learners throughout adulthood, they might consider modifying the sort of learning required of their students. For example, the primary motivation of much student learning is an examination: one of the least common reasons is the desire to use the knowledge and skill in some action project that is important in the student's daily life. Yet the pattern of adult learning is just the opposite: use is the most common, and examination the least common, of the 13 reasons.

This raises two questions in my mind about the effectiveness of schools and colleges, because there are two ways in which future adult learning can be facilitated while the future adult is enrolled in a school or college. One, to what extent do schools and colleges actually increase the amount or frequency of adult learning?[29] For example, does the student in a secondary school develop a much stronger tendency to learn when faced with a problem or responsibility that could be handled more efficiently and effectively by learning? Does the college student become much more likely to begin a sustained deliberate effort to learn when he becomes puzzled by some important issue or phenomenon?

Two, to what extent do schools and colleges actually increase the student's skill in planning and conducting the sorts of learning that will be important for him after he finishes his full-time schooling? When faced with a problem or responsibility or action goal (whether on the job or in his personal life), for example, does the secondary school or college graduate have excellent skill in deciding what knowledge and skill would be especially useful? When deciding whether to begin a particular learning project, can he accurately estimate the costs (time, money, effort) and the benefits (better performance, saving of time in the long run, enjoyment)? Unfortunately, the typical full-time student receives very little practice in these skills because he rarely has much real choice about whether and what to learn.

Implications for those who help adults learn

The findings may help a person understand the reasons for the existence of a certain course, conference, or other training or educational program for adults. Such reasons can be considered from three points of view.

First, the adult learner may enter the program, or remain in it, because of some combination of the 13 reasons. Several of the learners in this study, for instance, did attend a course as part of their learning activities.

Second, the perception of the program planner, instructor, or other educator concerning the participants' probable reasons for attending are important. These estimated reasons are probably included in our 13 reasons. For example, the adult educator may want to prepare people for attending a series of musical or dramatic productions (reason #1), for an examination set by some other organization (#2), for teaching certain content (#3), or for competent performance of some current or near-future responsibility or task (#4). Or he might guess that several people at a given time will be curious about some current issue or phenomenon, such as a controversial war or the uses of computers. Also, if he understands and sympathizes with the various reasons for learning, the adult educator may be more effective in counseling an individual adult about what to learn.

Third, the adult educator may himself exhibit some of the behavior patterns found in this study. For example, he may sometimes go through the three-step sequence of (1) becoming aware of the need for a certain action goal (such as greater corn production in his county, or the efficient operation of a new machine or system in his company), (2) deciding what knowledge and skill is relevant for that action goal, and (3) deciding to go ahead with a program that will give the relevant individual an opportunity to learn that knowledge and skill.

Also, of course, the effective adult educator probably conducts several learning projects for himself: he often deliberately sets out to gain certain knowledge and skill.

The other implication for those responsible for helping adults learn is simply this: the why may affect the how. The learners' reasons for participation in an educational or training program may have a great impact on the sorts of help they want and need, and on the most effective role, functions, methods, and relationships of the instructor or other helper. Thus, by pointing out some differences among various learning situations, our set of reasons for learning may help the program planner and instructor operate more effectively.

28. Notes

[1] The term reason was chosen after some thought and after consulting three dictionaries, because it seemed the most comprehensive term that accurately described what we were seeking. One dictionary (Funk & Wagnalls Standard College Dictionary, 1963) suggests "a motive or cause for an action" as the first definition, and says that reasons can include the intended effects, the inner impulses, and the objective external grounds. Another dictionary (Shorter Oxford English Dictionary, 1944) refers to "a fact or circumstance forming . . . a ground or motive leading . . . a person to adopt . . . some course of action or procedure . . . ."

[2] More precisely, at the time he began the first learning episode in which his primary intention was either to gain certain knowledge and skill or to plan or make arrangements for such an episode. Several episodes devoted to deciding whether to begin the learning project might have preceded this first learning episode.

[3] If necessary, he was allowed to select one most important reason for beginning and another for continuing, or to select two equally strong reasons for beginning or continuing or both. He had previously set aside any sheets for which the following question had been answered affirmatively: "Do you think this might have been the strongest reason for beginning? Or for continuing?" The interview ended with a few additional questions and an expression of gratitude.

[4] This generalization is supported by an additional examination of the raw data for the very strong and fairly strong reasons (that is, omitting the data for weak reasons). Of the 35 learners, 19 had more reasons for continuing the learning than for starting it. About half of these learners added only one new reason, but several added more than that and one added 7 new reasons. (Nine learners had the same number of reasons for both beginning and continuing, and 7 had slightly fewer reasons for continuing.) This tendency for more reasons to be strong for continuing than for beginning

is also demonstrated by the median number of strong reasons stated by the learners (4 for beginning and 5 for continuing), and by the ranges (from one to 8 for beginning, and from one to 11 for continuing).

[5] Additional data regarding the relative importance of the 13 reasons are shown in Table 6 on the next page.

[6] This is one of the two reasons that did not seem to be understood clearly by at least 33 of the 35 adults. (The other reason was #12.) After discussing each reason (before moving on to the next reason) the interviewer circled her opinion regarding this question: Did this person understand this reason clearly? No Yes. Nine persons seemed unclear about this reason. Of these 9, 6 said this reason "was not present at all." The other 3 said it was very strong or fairly strong for both beginning and continuing, but after studying their qualitative responses regarding this reason I decided that reason #1 should be recorded as absent from their learning projects.

[7] Almost half (16) of the 35 learners chose this reason as the *single* most important reason for beginning, and another 5 chose it as one of two equally important reasons. For continuing the project, the corresponding figures were 18 and 4.

[8] Data regarding areas of life for one of the 21 persons have been lost.

[9] Not one of the 4 was receiving academic credit for the learning project. The woman learning general mathematics in preparation for a future statistics course was the only one who did not also mark another primary area of life. The theological student was the only full-time student, but his learning project was not part of the curriculum. The opera singer was a part-time music student and the speed reader was enrolled in a speed-reading "school."

[10] There was one small exception: both of the persons motivated by an examination situation followed the first pattern. Also, of course, the action episodes for reason #3 consisted of *imparting* the knowledge.

[11] *Progress* refers to someone being aware of the length of road already travelled; that is, of the size of the difference or gap between the starting level of knowledge and skill and the current or final level. If the learner planned to demonstrate only the *final* level of knowledge and skill (or to impress the person by some achievement or some level of performance made possible by this final level of knowledge and skill), this would be reason #4 or #2. In the present reason, #5, the person wants the other person to notice his learning efforts or learning progress, rather than the resulting knowledge and skill or something he does with that resulting knowledge and skill.

[12] The importance of this reason is also pointed up by another finding. All but 10 of the 35 learners selected one of the first 4 reasons (the desire to use the knowledge and skill somehow) as their most important reason for

TABLE 6

ADDITIONAL DATA REGARDING THE RELATIVE IMPORTANCE OF THE 13 REASONS

Reason	Number of Projects in which Most Important for Continuing	Number in which Very Strong		Number in which Very Strong, Fairly Strong, or Weak but Definitly Present	
		For Beginning	For Continuing	Beginning	Continuing
1. Use in order to understand	2	3	6	17	17
2. Use in an examination	0	0	0	2	2
3. Use in order to impart	3	8	10	16	20
4. Use for taking action	22	22	30	32	34
5. Someone noticing the learning efforts	1	3	2	12	16
6. Puzzlement, curiosity, or a question	7	11	10	26	25
7. Satisfaction from possession	2	5	6	18	20
8. Enjoyment from receiving the content	0	3	12	19	22
9. Enjoyment from practicing the skill	1	3	7	10	12
10. Feeling of learning successfully	1	2	5	10	23
11. Pleasure from the activity of learning	1	6	6	21	20
12. Completing unfinished learning	0	1	2	3	4
13. Unconnected benefits	0	2	4	10	11

[a] N=35.

beginning the learning project. In 6 of these 10 projects, the present reason (#6) was the single most important reason for beginning, and in another it was one of 2 equally important reasons. No other reason was the single most important reason in more than one project: that is, in the 3 remaining projects, each of 3 different reasons was selected once as most important.

[13] It seems to me that the benefit could continue even after the knowledge was forgotten or the skill had greatly decreased. That is, the benefit could come from once having possessed the knowledge and skill. For example, a person might feel confident or satisfied, or might consider himself "a good citizen" or "a liberally educated man," simply because he used to know a certain thing or once could do a certain thing. In our interviews we did not locate an example of this, perhaps because none of the learning projects was more than a few months old.

[14] The sequel to this learning project is rather interesting. When the car broke down and she learned that it was difficult to obtain the needed part, she abandoned her efforts to drive. At the time of the interview, which was about 5 months after the breakdown, "the car was still sitting in her garage." Probably the gap between role of "broken-car owner" and "consequently not driving, though holding a license" is far less than that between "car owner" and "not holding a license."

[15] Not one of the 35 learners chose this as his most important reason. It is conceivable, however, for a learner to have this as the most important single reason but for its strength to be less than the sum of all his other reasons.

[16] Although the wording seems fairly clear, 4 persons said that some of their enjoyment in receiving content came because they could see its future uses. Such motivation probably should have been included only under reason #4. In addition, one or two persons partly confused this reason with one of the 3 subsequent reasons, which they had not yet read.

[17] These 3 reasons seem closely related to a factor called "learning orientation" found by both Sheffield (1964) and Flaherty (1968). The concept was originally used by Houle (1961) to describe the person who learned constantly and avidly primarily because of "the desire to know" or "the itch to learn (p. 25)." In both the Flaherty (in her first order factor analysis for the total group) and Sheffield studies, the same 5 items received the highest loadings. These items were to satisfy intellectual curiosity, to satisfy an innate need for information and knowledge, to fill an innate yearning for knowledge, to satisfy an enquiring mind, and to enjoy seeking knowledge. These 5 items seem closest to the reason #6 in the present study. Indeed, going through Flaherty's questionnaire in order to select the items closest to our reason #6, I selected these 5 items and no others. Some of these 5 items seem rather general, however, in that the verbal descriptions seem to contain elements of 2 or 3 distinct reasons: an item might evoke a positive response from one person for one reason and from another person for another reason. For example, a person who often learned (or who had enrolled in a part-time degree program) partly because of our reason #7 might respond

positively to 3 of the highest 5 learning orientation items (Flaherty's third, eighth, and fourteenth variables). In addition, a person motivated by our reason #8 (such as our interviewee in a T-group) might respond positively to the Flaherty item with the sixth highest orientation loading. My major reaction to the portions of the Sheffield and Flaherty study dealing with learning or orientations are (1) their items were very useful to us when developing our 13 reasons, (2) our distinctions among our sixth, seventh, and eighth reasons are valuable and accurate (and are perhaps more meaningful and useful for some purposes than the factor analytic findings), and (3) the factor analytic findings do not raise any doubts about our distinctions and findings: that is, the findings of all three studies are compatible.

[18] Several learners whose primary goal was the application of the knowledge and skill said that their motivation or satisfaction clearly increased when they began to perform the application well, or when they became aware of clear progress toward their action goal, or when they saw some evidence that the knowledge and skill was relevant and useful and "the right thing to learn" for their goal. Probably some of this motivation and pleasure is related most closely to the action goal (and therefore to the first 4 reasons in the interview) and some of it to the learning (the present reason, #10). Apparently some people were pleased to be *learning* well, and regarded the increasingly successful application or performance as evidence of effective *learning*.

The two women learning to sew are examples of this: indeed, they could see tangible evidence of their increasing skill in the form of completed pieces of sewing. The golfer, too, could see tangible evidence of his increasing skill, as well as feeling subjectively that he was progressing. A few persons became more aware of their progress in learning as a result of comments by an instructor.

[19] Each of several other underlying reasons was stated by one or two individuals. One said he engaged in learning because of a general desire for development or growth, and another because of a good feeling of growth or mind expansion. One person, apparently wanting to retain her mental capacity in order to deal with future needs, said that "a person can go rusty without learning." The pressure for one or two other persons seemed to come from the existing or increasing amount of knowledge in the world: one felt "there is so much to learn" and another said she wants to know a lot, regardless of subject matter. One or two others seemed to feel some pressure from, or obligation to, society or the common good: one of these said she "owes it to society to be learning and to be knowledgeable." One other person, perhaps frustrated by lack of time or upset by her perception of herself as a person who never quite got around to learning, expressed great satisfaction "because she finally was settling down to learn something."

[20] One of these is the desire for sociability: when learning in a group or through conversing, one meets people and finds companionship. Sheffield's fifth orientation adds some other benefits "which may have no necessary connection, and often no connection at all, with the content or the announced

purposes of the activity (p. 18)." These additional benefits include seeking relief from boredom, and overcoming the frustration of day-to-day living. In a later study by Flaherty (1968), these two items alone formed a separate factor. To summarize, then, our reason combined Sheffield's "sociability orientation" with Flaherty's "relief from boredom-frustration." Flaherty's "need for acceptance by other people," which for Sheffield was combined with relief from boredom-frustration to form a "need-fullfillment orientation," seems to be included in several of our reasons. The acceptance could come from being a member of a learning group (our reason #13), from our reason #5, or as a result of (that is, one step removed from) impressing people with a competent performance or successful end-product in our reason #4.

[21] The two exceptions were a busy young mother who had few activities of any kind open to her, and a woman whose benefits included several close friendships developed in a T-group.

[22] Goble (1964), for example, found that extremely few women perceived the local home demonstration club as a way of improving their performance as a parent, wife, housekeeper, or whatever. Neither members nor non-members of the club "identified useful subject matter as a reason for joining a learning group to a significant degree (p. 85)." She concluded that "the learning of subject matter appears to be incidental to other motives (p.88)."

[23] Houle (1961) makes the same point very effectively as follows, when referring to the learning-oriented adult:

> Each particular educational experience of the learning-oriented is an activity with a goal, but the continuity and range of such experiences make the total pattern of participation far more that the sum of its parts. To draw a parallel, a man reading a novel may be inferred to have a purpose in mind for reading it, but if he reads five novels a week, year after year, his habitual behavior as a novel-reader is more notable than the act of reading any individual novel (p. 24).

[24] In fact, several learners seemed to have no doubt about whether to begin the learning project because, as soon as they decided on (or were assigned) a certain action goal, they realized that learning would be necessary for the desired level of performance or product.

[25] Another possible consequence of spending too little time at the learning is that the total amount of time spent in action episodes and learning episodes may be greater than if he had spent more time learning. Section 10 describes the 6 persons who were motivated partly by the desire to minimize time in the long run.

[26] There probably is a certain minimum and maximum amount of investment that will pay off well. Too little research, for example, will cost the government (or society) or company more in the long run because the action goal will be much less successful or more expensive than if more resources had been put into research earlier. Probably there can be too much research, too, in that after a certain point the cost of additional research will be greater than the eventual benefit. It seems to me that this sort of thinking

applies to so-called pure or basic research, as well as applied research, if we take a sufficiently long-term view.

[27] Later pages (especially 235-238, 243 and 263, and 249-251) point out the influence of socio-economic status or age on this general conclusion.

[28] This relationship between powerlessness and knowledge or information-seeking has been studied by Seeman (1967), White (1968), and others. The general finding is that people who believe that the environment is one upon which they can have some effect seemed to know or learn more about that area of life (such as health, parole, politics, or nuclear warfare) than people who feel powerless. The powerless person feels that fate controls him; he does not feel able to win or achieve something even if he struggles hard against the odds, and he sees little chance of influencing the given issue or outcome. Our study indicates that the main reason for trying to learn (thus increasing one's knowledge and one's score on a researcher's test) is the desire to use that knowledge and skill. Obviously a person would not set out to learn for this reason unless he believed that he could use the new knowledge and skill: if he saw little chance of doing anything with the knowledge and skill, he would be unlikely to begin learning it. Presumably, powerlessness would not influence learning for one's own enjoyment or some such reason. However, some third factor (such as low energy level, lack of joie de vivre, low ambition, or low interest in political and cultural and intellectual matters) might create an apparent correlation between such learning and powerlessness.

[29] The argument that they obviously do so a great deal because many studies demonstrate the relationship between educational level achieved and participation in adult education is not very convincing. Some combination of underlying factors (such as mental ability, curiosity or desire for new knowledge, submissiveness or dependence, positive attitude toward educational institutions and teachers, and ambition) may be primarily responsible for both. That is, educational level probably does not cause further participation to a large extent. In addition, one really has to compare the present actual impact of secondary schools and colleges with their potential impact.

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